



## Marshall County Water Corporation

*Committed to Providing Clean, Safe Water for All Our Residents*



TESTIMONY OF  
**ROBERT MOORE**  
GENERAL MANAGER  
**MARSHALL COUNTY WATER CORPORATION (OKLAHOMA)**  
ON BEHALF OF THE  
**OKLAHOMA RURAL WATER ASSOCIATION**  
AND THE  
**NATIONAL RURAL WATER ASSOCIATION**  
BEFORE THE U.S. SENATE  
**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**  
APRIL 7, 2016

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***"The Federal Role in Keeping Water and Wastewater Infrastructure Affordable"***

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Good morning Senator Inhofe and Members of the Committee. I am Robert Moore from rural Oklahoma. I am the general manager of the Marshall County Water Corporation. We are a non-profit drinking water supply organization providing drinking water to all of Marshall County and portions of Johnson, Carter, and Love counties. We have two surface water treatment facilities that service a population of approximately 15,000 people.

I am representing all small and rural community water and wastewater supplies today through my association with both the Oklahoma and National Rural Water Associations. Our member communities have the very important public responsibility of complying with all applicable regulations and for supplying the public with safe drinking water and sanitation every second of every day. Most all water supplies in the U.S. are small; 94% of the country's 51,651 drinking water supplies serve communities with fewer than 10,000 persons, and 80% of the country's 16,255 wastewater supplies serve fewer than 10,000 persons.

*I want to acknowledge that rural America is very appreciative to you, Senator Inhofe, for standing up for rural communities on environmental issues. Your actions have improved the lives of all rural families and also led to improvements in the environment and public health in rural USA. Specifically, your leadership on critical water funding has ensured that federal regulations don't have an adverse impact on people, that technical assistance is provided to allow compliance with EPA rules, and that on-site education is available to show how to protect the safety of the public's water throughout rural and small towns in every state.*

The small community paradox in federal water policy is that while we supply water to a minority of the country's population, small and rural communities often have more difficulty providing safe, affordable drinking water and sanitation due to limited economies of scale and lack of technical expertise. Also, that while we have fewer resources; we are regulated in the exact same manner as a large community, we outnumber large communities by a magnitude of 10-fold, and federal compliance and water service is often a much higher cost per household. In 2016, there are rural communities in the country that still do not have access to safe drinking water or sanitation due to the lack of density or lack of funding. Included with my written testimony are recent news profiles of communities that lack basic drinking water access (Appendix A). Our association's mission has been to expand water service to these communities and to assist existing water utilities with compliance and maintain safe and clean water service.

In addition to the management, finances and governance of the utility, I am what could be called a "*working*" general manager. Much of my day is spent in the field boring and trenching water lines, operating the loader and dump truck or conducting all the routine maintenance on the distribution system. If someone in my community loses water service from some emergency situation in the middle of the night, the emergency call gets forwarded to my house. When that occurs, and it does, I have to wake up my operators and we go out and fix the problem. That means we have to operate the backhoes, dig up the broken lines, get in the trench and repair the break and back-fill and fix the excavation.

Marshall County Water has a similar story to many other rural and small town water supplies. We were started to provide the first water service to rural communities that had limited access to water or marginal well water. In 1972, we were started to supply water to about 800 farms and ranches. My grandfather's ranch was one of those first 800 ranches that got water in 1972. Like many of first 800 users, my grandfather was Choctaw and was granted a small amount of land to farm as part of the 1907 Oklahoma Enabling Act. Before 1972 and the availability of public water service, he and everyone else in rural Marshall County relied on limited well water that contained high concentrations of sulfur for their livelihood. The federal government provided the funding to begin and later expand our water service through low interest loans from the U.S. Department of Agriculture (USDA). This assistance has resulted in a great improvement in public health, quality of life, and economic development in the area. The citizens of Marshall County are grateful for this assistance. But we are currently indebted to USDA for approximately 12 million dollars. Marshall County Water currently needs additional water infrastructure funding. We need three million dollars for a new 15 mile raw water pipeline that will allow us to meet our demand. Marshall County Water is governed by a seven member board of volunteer directors that consist of four farmers/ranchers, a banker, a state government employee, and a preacher.

Like my community, many small and large communities in the country are in need of water infrastructure funding. However, before making recommendations on federal infrastructure funding policies, it should be clear that lack of funding is no excuse for poor governance or management of a public water supply. Much of the national focus on water is currently viewed through the crisis in Flint, Michigan. In that case, there was no call for funding to prevent the specific lead contamination that occurred before it happened. Whoever was in charge of making those decisions in Flint believed the water was going to be safe. That turned out to be wrong, but it was those management and governance decisions that led to the current situation, not any identified lack of funding. No matter how dire our funding situation, we would never knowingly allow for unsafe drinking water to be provided to the public. In the aftermath of the Flint crisis, the public should know that they are the guarantor of the safety of their public

drinking water through their local governments. The public owns and operates their public drinking water supply and is responsible for its safety. Every day, someone who works for your local community is making second-to-second decisions about adding essential purifying chemicals, killing pathogens, watching for changes in complex water delivery systems, and keeping your family's drinking water safe because that is what they want to do. Local government only exists to protect the public and it is the most accountable and representative body to (and of) the public. Flint should serve as a wake-up call for the public to support and participate in their local government and accept responsibility for its operation.

We can't advise Congress on what is the appropriate amount of federal financial aid for water infrastructure in the context of the current federal budget constraints. However, there is currently more demand for federal water infrastructure funding than supply. Much of the demand is created by the financial burden of federal unfunded mandates. In crafting federal water infrastructure funding policy, small and rural communities urge Congress to consider the following four policy principles - and two observations - based on their merit.

First, local communities have an obligation to pay for their water infrastructure and the federal government should only subsidize water infrastructure when the local community can't afford it and there is a compelling federal interest such as public health, compliance or economic development. I mentioned earlier that my community is in need of a three million dollar funding package to build a transmission line. We have been denied a federally subsidized loan because the federal agency determined that we could afford to obtain a commercial loan from a bank and did not need the federal taxpayer to subsidize our water infrastructure. We are currently in the process of obtaining a commercial loan from our local banker to complete the project. This loan will have a 4.9 percent interest rate. We would have preferred a federally subsidized loan with a lower interest rate, but we understand that if we can afford the project on our own, the rest of the county should not subsidize our water system.

Some federal programs like the U.S. Department of Agriculture water infrastructure program contain this needs-based criterion. USDA calls this the "credit elsewhere" criterion. The state revolving loans achieve this principled objective by requiring that federal subsidies be targeted to the communities most in need based on their economic challenges combined with the public health necessity of the project. One of our concerns with the new Water Infrastructure Finance and Innovation Act (WIFIA) is that it lacks any needs-based targeting, credit elsewhere means-testing, or focus on improving public health or compliance. In fact, WIFIA subsidies are limited to communities that have good credit (33 USC § 3907), thus precluding WIFIA subsidies from addressing the country's most needy water problems including Flint, border colonias, and other low-income communities with contaminated drinking water (Appendix A). This year's EPA budget request has a precipitously decreased funding request for the state revolving funds (SRFs) and a substantially increased funding request for the WIFIA program. Could the funding for WIFIA have been dedicated to the SRFs? This analysis answers the question of competition between the two water funding programs. Also, this gives the appearance that limited federal water subsidies are moving from programs targeted to the neediest communities to communities with less need.

**Example:** *The WIFIA program can only subsidize water projects (including corporately owned water companies) that can "demonstrate an investment-grade rating," (33 USC § 3907). Flint has "no current ratings for the City. Prior ratings were withdrawn as the City's financial position led to consideration of the City being placed into receivership," according to the City's Annual Financial Report 6/30/2015.*

Second, all U.S. Environmental Protection Agency (EPA) water funding programs should be primarily dedicated to compliance with EPA's federal mandates or standards. Currently, the Safe Drinking Water Act and Clean Water Act are creating a tremendous financial burden on small and rural communities. The funds provided by Congress, however, are not consistently applied to communities that are experiencing the greatest burden as a result of federal compliance. Much of the current and acute unfunded mandate burden is a result of the EPA's implementation of their Total Maximum Daily Load (TMDL) program that is causing reductions in wastewater nutrient permit limitations and corollary expensive wastewater treatment plant upgrades. These communities should be a priority in targeting all EPA wastewater funding subsidies, and in many cases they are not.

**Example:** *The Lake Onondaga TMDL is estimated to cost the Village of Marcellus, New York over \$5,500,000 for compliance. The Village of Marcellus has 1,300 users and is currently deeply indebted for previous compliance. It is desperately seeking financial assistance from the EPA clean water SRF and has not been able to secure any financial assistance. However, much of the EPA funding has been used for non-compliance related projects - and much of the funding has been for grants. According to the New York state government, from fiscal year 2012 through 2014, the state "used 100% of our authority for additional subsidization to fund grants through our Green Innovation Grant Program." It appears none of these grants were for compliance with federal clean water regulations (Appendix B). It is not clear if any economic needs assessment was used in awarding these grants. EPA clean water SRF funding allowed for a set-aside of not less than 20 percent but not more than 30 percent of the funds to be used for grants. Recent EPA clean water funding grants to New York include \$147,369,000 for fiscal year 2013 and \$154,748,000 for fiscal year 2014.*

Third, a small percentage of water funding programs should be set-aside for technical assistance and training. Small communities often lack the technical and administrative resources to achieve compliance and complete the necessary applications to access the federal funding programs. Providing these small communities with shared technical resources allows small communities access to technical resources that large common communities have and are needed to operate and maintain water infrastructure, comply with standards in the most economical way, and obtain assistance in applying for state revolving loan funds. Often this assistance saves thousands of dollars for the community and keeps the systems in long-term compliance with EPA rules.

Fourth, regarding privatization of water infrastructure and public-private partnerships, NRWA has not opposed water supply privatization in principle. However, corporate water (profit generating companies or companies paying profits to shareholders/investors) should not be eligible for federal taxpayer subsidies. Private companies argue that they have to comply with the same regulations. However, the distinction in mission between public and private is the core principle that should be considered. Public water utilities were and are created to provide for public welfare (the reason why public water continues to expand to underserved and non-profitable populations). Any federal subsidy that is provided to a corporate water utility can't be separated from subsidizing that company's profits.

There is a current misconception among some stakeholders that the SRFs have a limitation on size or scope of a water project and don't leverage federal dollars. States **can** currently leverage a smaller amount of water funding to create a much larger available loan portfolio. In 2012, Oklahoma passed a statewide referendum to create our Water Infrastructure Credit Enhancement Reserve Fund. This fund allows Oklahoma to issue bonds to fund water

and sewer infrastructure by leveraging \$300 million of general obligation bonds to leverage \$3 billion in new financing for water projects. This leveraging is occurring with no federal subsidy. Similarly, states can use their federal SRF grants to leverage larger loan portfolios. According to the U.S. EPA, State SRF programs can increase funds through different types of leveraging such as:

- Using fund assets as collateral to issue tax-exempt revenue bonds;
- Using funds from one SRF program to secure the other SRF program against default through cross-collateralization;
- Using funds from one SRF program to help cure a default in the other SRF program through a short-term cross-investment; and
- Increasing disbursements to incrementally fund multiple projects within a capital improvement plan.

A 2015, Government Accountability Office (GAO) report on the state revolving funds found: “*EPA tracks the amount of additional loans that are made because of leveraged bonds. States’ Clean Water SRF programs have issued approximately \$31.8 billion in loans with leveraged bonds, and states’ Drinking Water SRF programs have made approximately \$5.3 billion in additional loans with leveraged bonds...*” [Source: State Revolving Funds, August 2015 GAO-15-567]

Regarding the misconception some stakeholders are advancing that the SRFs have a limitation on size or scope of a water project, there is no size or scope limitation for water projects under the state revolving funds. According EPA, most SRF funding is allocated to large communities.

- Approximately **72 percent of clean water SRF funding** is awarded to large communities (EPA Clean Water State Revolving Fund Annual Review).
- Approximately **62 percent of drinking water SRF funding** is awarded to large communities (<http://www.epa.gov/ogwdw/dwsrf/nims1/dwcsizeus.pdf>).

A simple review of projects funded the SRFs show numerous projects funded that cost over 50 million dollars (Appendix C). It appears that the SRFs are used in every large water project in the country. This assertion should be verified by the EPA. The state of New York lists multiple projects funded by the drinking water SRF that cost over one billion dollars (Appendix C).

### **Consolidation and Regionalization**

Rural Water supports consolidation and regionalization; it has been our core mission in expanding water service to deliver water to more rural families and enhance economic development. We have consolidated/regionalized many smaller communities and extended new water service to many rural families, communities, underserved areas, farms and businesses. This has been a great benefit to these rural households and small communities. However, the key ingredient in any successful consolidation is local support for the consolidation – and local control of when and how they choose consolidation. Rural Water has led or assisted in more communities consolidating their water supplies than any program, policy or organization. Again, when communities believe consolidation will benefit them, they eagerly agree. However, if communities are coerced to consolidate, one can almost guarantee future controversy.

In Marshall County, we have regionalized in a voluntary partnership with three small water systems that had been operating independently. By combining our four water utilities, we have achieved a greater economy of scale and have eliminated some redundancies like each of us having a separate office, board of directors, compliance regimes, financials, etc. People will regionalize if they can see the benefit. Our regionalization efforts have occurred over the last four years with one homeowners association of approximately 200 users and two privately operated small utilities of approximately 400 users each becoming part of Marshall County Water. As part of the transfer of these smaller systems, Marshall County invested 700,000 dollars in new water lines and a new water tower. While there was an initial cost to regionalize, the long-term benefit of an increased economy of scale will result in a cost savings to everyone in the entire water supply.

Local communities need to be planning long-term in making these decisions. By regionalizing our four small water utilities, we are all now in a better situation for the next 20 years. We will be better able to comply with additional regulations, meet the needs of future growth, and have the greatest abundance of shared expertise in our operators and management.

### **Federal Regulatory Standards**

The federal drinking water program can't clearly tell the public the one thing it wants to know -- how much of a substance in drinking water is unsafe? This problem is currently dramatized in Flint with lead, in New England with perfluorooctanoic acid (PFOA), and my community with trihalomethanes (TTHMs). Instead, the federal agencies say the obvious, that no amount of lead in your water is good and they impose a highly convoluted standard of 15 parts per billion on a certain percentage of the homes tested by the city. Is 15 parts per billion safe? Is 15.5 parts per billion unsafe? Should your family feel safe with water at 14.9 parts per billion? The Virginia Tech water group says 5 parts per billion is the level of concern. The World Health Organization says over 10 parts per billion is unsafe. What level of lead in drinking water relates to a commensurate level of lead in the body, and what level of lead in the body results in adverse health effects? This is what the public wants to know. In 2001, when arsenic was the focus of nation's attention, the EPA was asked what level of arsenic in drinking water is a risk to health. They couldn't answer the question, claiming it was a "complex issue."

Last year, Marshall County Water violated the EPA Total Trihalomethanes (TTHMs) regulation. We were required to write a letter to every home telling them we have a federal "health based violation" for a contaminant that may cause "cancer and central nervous problems." The federal standard for this chemical that results from our adding disinfectant to the water to make it safe to drink is 80 parts per billion. Our water had a temporary level of 84 parts per billion. Many interpret this "violation" to mean the water is unsafe, but is four parts per billion the difference between safe water and unsafe water? This is what the public wants to know. Some states have been compelled to issue additional public notices to warn consumers of the EPA mandated warning (Appendix D).

Currently, there are numerous communities in violation of various federal standards for naturally occurring elements in groundwater where the violation is of no public health consequence relative to the standard. Nobody thinks it would be good public health policy to force these families to face extreme financial burden for less than a one part per billion difference of, for example, naturally occurring fluoride in their water.

### **Drinking Water and Wastewater Regulatory Reform**

On October 2, 2015, NRWA forwarded to the EPA a number of federal regulations that could be modified or reformed to improve and enhance federal water regulations for small and rural communities. We are including this memorandum to the EPA and urge your consideration of any of these reforms (Appendix E). An additional issue is attached as an addendum. We hope you can implement modifications to current EPA regulatory policy to improve the national water program, enhance public health and better protect the environment. We look forward to working with you on these suggestions.

In closing, I respectfully urge you to consider the unique needs and concerns facing our rural and small town water and wastewater systems and incorporate these as priorities in future federal water funding programs and policies – and ensure that the neediest communities are prioritized in federal funding initiatives.

Thank you all for your assistance and for this opportunity.



# The American Neighborhoods Without Water, Sewers, or Building Codes

Low-income residents bought cheap land outside of border cities decades ago. But the promised infrastructure never came.



A boy in Los Fresnos colonia in Texas (Jessica Rindaldi / Reuters)

ALANA SEMUELS

MAR 3, 2016

**MONTANA VISTA, Tex.**—No one objected when developers bought up dusty vacant land here in the 1950s and 1960s and turned it into unincorporated subdivisions—areas outside city limits where no one had authority to enforce building standards.

Neither the state nor the county stepped in when the developers turned around and sold that land—making empty promises to later add running water and sewer systems—to low-income immigrants who wanted, more than anything, to own a home of their own. And no one batted an eyelash when low-income landowners in these unincorporated border subdivisions, called colonias, started building homes from scratch without building plans or codes, or when they started adding additions to those homes as their families grew, molding structures together with nails and extension cords and duct tape.

That's because, in Texas, all of these actions were perfectly legal. Texas prides itself on its low taxes and lack of regulation, but it's possible that decades of turning a blind eye to

unregulated building is starting to catch up with the state. Today, around 500,000 people live in 2,294 colonias, and many still lack access to basic services, such as running water or sewer systems. Lots of residents live in dilapidated homes with shoddy plumbing and electrical wiring that they've cobbled together themselves to save money on contractors. And now, they want the state to pay to extend basic services in their homes. Water, for instance, should be a human right in America, they say.

"You have families that live in third world conditions in the state of Texas with a modern city just miles away," said Veronica Escobar, the County Judge of El Paso, who functions as a county chief executive. "But the state of Texas has essentially put counties in charge of health, safety and welfare, at the same time they give us very limited authority."

Alejandra Fierra lives with her husband in the Hueco Tanks colonia, where they bought land in 1987. They still don't have access to running water or a sewer system. When her children were growing up, she would pour water from a well into a tub and wash them, one, two, three, in the same water. She does the same for her dishes. She gets a delivery of a 2,500 gallon water tank for bathing and washing, and buys bottled water from Walmart for drinking and cooking.

In Montana Vista, a colonia some 22 miles east of El Paso, the septic tanks of the 2,400 families who live there frequently overflow, creating rivers of sewage in their backyards. In the summer, the smell can be horrific. Tina Silva, a resident and activist, lives here in a spacious one-story adobe house surrounded by a stone wall. She raises chickens and a giant pig in her backyard, where a rusted out car sits, half painted, in the sun. She loves her home and her neighborhood, but she doesn't understand why it has taken so long to put in a sewer system. "We're human beings. We pay taxes. Somebody needs to listen to us," she says. Various politicians have promised her they'd help get the money to install services, but it's never actually happened, Silva told me.



Tina Silva feeds the chickens in her backyard at Montana Vista (Alana Semuels / The Atlantic)

Part of the problem is that no one wants to take responsibility for paying to install these services. The developers who sold the land promising water and sewers are long gone. And for many the thinking—at least according to Escobar—is that if the homeowners wanted to buy land without access to running water, that's their problem.

It may seem obvious that the homeowners who bought cheap land without access to water and sewers should be responsible for installing access to services. But that isn't realistic either. More than 40 percent of colonia residents live below the poverty line, according to a [2015 report](#) from the Federal Reserve Bank of Dallas. The median household income in colonias is less than \$30,000 per year. And the conditions in the colonias are troubling. There are water and mosquito-borne illnesses, high rates of asthma, lice, and rashes. One doctor Tribune that rates of tuberculosis in the colonias are two times the state average and that there is a lingering presence of leprosy.

In 2012, the Texas Department of State Health Services issued a nuisance determination in Montana Vista documenting the health problems the septic tanks were causing, which meant the El Paso Water Utility could receive a grant for more than half of the project costs. In December, the Texas Water Development Board agreed to provide a \$2.8 million grant to El Paso Water Utilities so that the utility could start designing the sewer system. But it will cost an estimated \$33 million to build the system, and that money has not yet been secured. "It's getting there, unfortunately, it's taking a lot of time," said Munzer Alsarraj, the infrastructure program manager for El Paso County.

The state is stepping in to upgrade some of the colonias, too. Between 2006 and 2014, 286 more colonias, were linked to drinking water, drainage, wastewater disposal, paved roads, and legal plats, according to the Federal Reserve report. In 2006, 443 colonias had access to no basic infrastructure, by 2014, that number had dropped to 337. But it's slow going.

It's not easy to install infrastructure in areas that are far from the main water and sewer lines and in places that have grown with no central plan. It was not until 1989 that the Texas legislature even asked state agencies to [come up with rules](#) that would ensure new residential developments had access to water and sewer services. Now, cities can regulate development in Texas, but in unincorporated areas, counties have little regulatory power. Zoning regulations that would limit the size of buildings or of lots in cities don't exist for the colonias. In some instances, the county can't install infrastructure to homes because they're not up to code. Because people building on unincorporated land don't have to follow many rules, there are odd constructions in the colonias, including units that combine two RVs, homes with rooms tacked onto the side standing on cinder blocks, homes with extension cords that run outside, wooden planks as sidewalks. This makeshift construction can lead to roof collapses and electrical fires, said Irene Valenzuela, the interim director of community services for El Paso County.



A home in a Texas colonia consists of a trailer and a house (Eric Gay / AP)

The county is giving grants out to people interested in bringing their homes up to code, but people are often hesitant, she said. "I think the majority of them are afraid," she said. "They say, 'This is a takeover. What are you going to ask for next? If you assist me, are you going to take my property away when I pass away?'" Alsarraj, with the county, added.

Then there's the cost. The county is trying to install sewer lines in the Square Dance colonia. That colonia is located just a few blocks from established subdivisions that are part of the county's water and sewer system. But the price of adding those services to the colonia's 264 homes is \$8.5 million. Installing water and sewers in another colonia, called Hillcrest, would cost about \$120,000 per home, Alsarraj said. But the homes are worth just \$20,000 to \$30,000 each.

It's ironic, too, that the county is trying to extend water and sewers to far-off subdivisions as it also tries to [execute a vision](#) that cuts down on sprawl. "For 30, 40 years, we've continued to sprawl out to the edges of the earth and it was costing us more than we were making as a community," Beto O'Rourke, a U.S. Congressman who led the charge to cut down on new subdivisions, told me.

But El Paso has had little success regulating far flung subdivisions, even when they are incorporated.

Perhaps most worrying to Escobar and others is that [new colonias](#) are still being built across the state. This time around, they have basic water and sewer hookups, but don't have paved roads or streetlights, according to the Federal Reserve. Plots cost as little as \$25,000, and developers offer 20-year financing at a 12 percent interest rate and just \$500 down, according to [Bloomberg News](#).

It's proof to Escobar that developers will always be willing to sell substandard plots of land to people desperate to own a home. But she had hoped Texas would step in and regulate. Two sessions ago, the county tried to get permission for zoning authority over 60 square miles near a border crossing south of El Paso. But the state legislature refused to grant it , in part because real-estate agents objected to the bill, said Escobar, the judge. Legislators also didn't believe that government should trump property rights, she said. But perhaps that's because they don't have to deal directly with the after-effects.

"We are having to fix the problems caused by unregulated government," Escobar said. "There are innumerable examples and costs associated with fixing problems that could have been prevented. There's just a fundamental belief in Texas—if you own property, you can do what you want with it."

# Like Flint, water in California's Central Valley unsafe, causing health problems

By [Rebekah Sager](#) [Fox News Latino](#)

Published March 08, 2016



(Photo by Justin Sullivan/Getty Images) (2015 GETTY IMAGES)

While the water crisis in [Flint, Michigan](#), made headlines around the country when the city's leaders exposed residents to a tainted water supply for almost two years, families living in the Central Valley of California have been struggling without clean drinking water for decades.

The population of the Central Valley, a basin surrounded by mountains that once offered hope to migrants like the fictional Joads in the "The Grapes of Wrath," today is about 80 percent Latino, and 92 percent of the migrant farm workers in the Valley are Latino.

There are vast dairy farms reeking of manure, highways lined with fast-food restaurants, liquor stores, prisons and numerous dialysis centers.

Much of fruits and vegetables consumed in the U.S. are grown here, and the soil has been decimated by agricultural activity – overuse of fertilizers and pesticides, manure from livestock. One result is a toxic soup of nitrates in the area's drinking water.

Residents in towns along the San Joaquin Valley rely predominantly on pumps and ground water – which is not effectively regulated for contamination.

When pumped up into people's homes, the nitrates are so dangerous that people are known to get rashes when they shower. The presence of nitrates in the water supply also has been linked to "blue baby syndrome," which is caused by the decreased ability of blood to carry oxygen – one of the most common causes is nitrate in drinking water.

People turn to buying five gallon jugs to shower with and using 300-gallon tanks of non-potable water for basic needs.

"Generations of people who live here know not to drink the water," Susana De Anda, a clean-water advocate and the co-executive director and co-founder of the Community Water Center NGO, told

"People pay more for this 'toxic water' – sometimes as much as \$100 a month for water just to shower with. On top of that they're paying for drinking water," De Anda said.

According to the Environmental Justice Coalition for Clean Water, rural Central Valley communities pay the highest drinking water rates in the state, with some families shelling out as much as 2 to 6 percent of their income for water that they can't drink.

According to a [Pacific Institute report](#), nitrate exposure's health impacts in the Central Valley fall disproportionately on poor Latino communities.

Due to the state's severe drought, new wells have to be dug more deeply, demand is high and the cost is between \$1 million and \$2 million dollars.

"The drought actually causes the pollutants in the soil to be more concentrated and levels of contaminants such as nitrates to rise. Also, when deeper wells are dug, and that would be by maybe wealthier farmers, they actually end up siphoning water away from poor communities," Genoveva Islas – program director at Cultiva la Salud ("Cultivate Health"), a non-profit health advocacy organization in the Central Valley – told Fox News Latino. "And it creates a real inequity."

Most people in the area live a large distance from the closest big grocery store. Liquor and convenience stores become the default place to buy food and produce, and, all too often, sugary drinks are less expensive than drinking water.

"We're in a food desert. People would buy water in bulk, but big stores are often very far outside of communities, and so families make a tough trade-off. Soda might be more affordable," De Anda said. In addition to other factors, the consumption of soda vs. water is one of the leading reasons for the severe health problems in the Valley. The region has big problems with obesity and the highest rate of Type 2 diabetes in the state.

An analysis of state's death records by the [Fresno Bee](#) and the Center for California Health Care Journalism at the University of Southern California paints a vivid picture of the disproportionate toll diabetes has taken in the Valley.

At least 19 people die from diabetes-related complications in the eight San Joaquin Valley counties every day, the highest rate in the state.

"I've lived here all my life, and not until I was an adult was really aware of dialysis clinics. Now, I have an aunt and a close family friend who are both on dialysis. I'm seeing a number of these [places] pop up. More than ever before," Islas says.

The Central Valley may be the fruit and veggie center of the country, but for poor people healthy food is still significantly more costly than food sold in bulk, such as beans, rice, tortillas, white bread, ground beef and large bottles of soda. Many of the stores in the Valley offer free soda with groceries, and a small bottle of water runs about \$1.69 versus a large soda at .99 cents.

In the last three years, the state has paid to retrofit water filters on drinking fountains in some pockets of schools and daycare centers, and provided filtered bottle stations, where people can fill-up containers. But Islas says it's not universal.

"There's still a lot of marketing of sugary drinks to kids, which in addition to diabetes and obesity, dental health problems. In Flint, the Governor has set aside money for the kids impacted by the lead, but in the Central Valley, we have the same issues of long term health problems for impoverished kids. We use education as a pathway out, but if you're thirsty or you have health concerns, it's pretty hard to learn," Islas says.

The drought in California may be shining a light on the region and its water supply, but the issues in the Valley have been left largely unaddressed.

"All these are interim solutions, but we also need to create water awareness. The water may look clean, but that doesn't make it safe. It shouldn't matter who you are or where you live, clean drinking water is a basic human right," De Anda says.

**New York State Environmental Facilities Corporation  
Green Innovation Grant Program (GIGP) Grantees for Federal Fiscal Year 2013**

**Albany University** Center Expansion Green Infrastructure, install pervious pavement, rain gardens, and a green roof as part of their Campus Center Expansion Project. \$607,847

**Broome County Green Stormwater** Infrastructure, install pervious pavement, rain gardens, bioretention, and convert an existing stormwater detention pond into a functional stormwater wetland. \$1,008,090

**Dutchess Bard College**, implement green infrastructure practices that slow the speed of stormwater, clean it, and infiltrate it. \$732,728

**Erie Village of Williamsville** Spring Street Green Reconstruction, install bioretention, rain gardens, and a green wall as part of the reconstruction of Spring Street. \$799,160

**Essex Town of Ticonderoga** Stream Daylighting, constructed wetland adjacent to Bicentennial Park. \$539,103

**Kings Blumenfeld Development Group Brooklyn Navy Yard**, install a green roof above "Building C" in the Brooklyn Navy Yard. \$275,778

**Kings Marine Park Seaside Links Rainwater Harvesting**, install a rainwater harvesting and reuse system at the Marine Park Golf Course in Brooklyn. \$502,900

**Monroe I-Square**, support rainwater harvesting and reuse, pervious pavement, rain gardens and green roofs as part of a larger redevelopment project. \$393,000

**Monroe Rochester Museum & Science Center**, to install a rainwater harvesting system, a green roof, bioretention practices provide a highly visible and educational resource. \$724,374

**Nassau Planting Fields Arboretum**, redevelopment of the main parking area at Planting Fields Arboretum and State Historic Site using green infrastructure. \$800,000

**Oneida City of Rome Capitol Steps**, install pervious pavement, stormwater street trees, and bioretention to revitalize the West Dominick Street arts and cultural district. \$230,900

**Onondaga Village of Fayetteville**, install pervious pavement, rain gardens, bioretention, and stormwater street trees to improve safety for pedestrians and beautify corridors. \$557,100

**Rockland Town of Clarkstown**, naturalize channelized streams, reconnect their flow to the adjacent regulated wetlands, educational kiosks and a small educational trail. \$1,000,000

**Suffolk Suffolk County Community College**, install a rainwater harvesting system, pervious pavement, and rain gardens at various locations on campus. \$393,043

**Tompkins Taughannock Falls Park Green Infrastructure**, installation of pervious pavement as part of a complete renovation of the Taughannock Falls State Park overlook, one of the most visited locations in the region. \$320,000

**Ulster County Campus Green Retrofit**, install pervious pavement, rain gardens, bioretention areas, and green walls at the recently relocated SUNY Ulster Extension Center. \$439,000

**Westchester City of Yonkers Saw Mill River**, continue the process of daylighting the Saw Mill River, with dramatic views upon entering downtown from the east. \$1,076,977

**SRF Projects Funded Costing Over \$50 Million****Clean Water Financing Proposed Priority System (FY2016)****New Jersey Department of Environmental Protection**

[http://www.nj.gov/dep/dwq/pdf/cwf\\_2016P\\_cwpl.pdf](http://www.nj.gov/dep/dwq/pdf/cwf_2016P_cwpl.pdf)

CAMDEN CITY	\$58,648,000
CAMDEN COUNTY	\$50,664,000
MIDDLESEX COUNTY	\$363,247,000
JERSEY CITY MUA	\$47,046,000
BAYSHORE RSA	\$5,894,000
PASSAIC VALLEY SC	\$134,646,000
PASSAIC VALLEY SC	\$58,205,000
PASSAIC VALLEY SC	\$60,117,000
BERGEN COUNTY UA	\$54,172,000
PASSAIC VALLEY SC	\$63,223,000
MIDDLESEX COUNTY	\$111,313,000
PASSAIC VALLEY SC	\$132,505,000
PASSAIC VALLEY	\$63,223,000
BELLMAWR BOROUGH	\$66,350,000
EDISON TOWNSHIP	\$55,475,000
CAMDEN RED AGENCY	\$172,309,000
KEARNY TOWN	\$107,557,000
PENNSAUKEN TWNP	\$55,431,000
SAYREVILLE ERA	\$50,664,000

**State Revolving Fund for Water Pollution Control Federal Fiscal Year 2016****New York State Department of Environmental Conservation**

<http://www.efc.ny.gov/Default.aspx?tabid=112>

GREENWOOD LAKE, VILLAGE OF	\$62,021,000
SOUTHAMPTON, VILLAGE OF COLL	\$30,552,000
CHEEKTOWAGA, TOWN OF	\$50,000,000
NASSAU COUNTY BAY PARK SEWER	\$50,951,925
NASSAU COUNTY BAY PARK SEWER	\$524,750,000
ONEIDA COUNTY PHASE 2B	\$59,500,000
ONEIDA COUNTY PHASE 5B	\$117,000,000
ONEIDA COUNTY PHASE 6A STP UP	\$110,600,000
SUFFOLK COUNTY SW SD #3	\$88,572,000
SUFFOLK COUNTY RT 25	\$76,230,000
UTICA, CITY OF	\$105,304,000

**Projects for New York City**

NYCMWFA WARDS ISLAND BRONX	\$64,091,406
NYCMWFA WARDS ISLAND STP REHAB	\$102,655,400
NYCMWFA BOWERY BAY STP MOD	\$50,412,000
NYCMWFA BOWERY BAY STP UP	\$204,301,784
NYCMWFA TALLMAN ISLAND STP UP	\$280,322,476
NYCMWFA JAMAICA STP IMP JA-179	\$57,267,070

## Attachment C

NYCMWFA 26TH WARD, BB, TI, WI,	\$93,802,596
NYCMWFA 26TH WARD STP IMP	\$51,101,400
NYCMWFA 26TH WARD STP IMP	\$100,595,678
NYCMWFA NEWTOWN CREEK STP UP	\$45,933,272
NYCMWFA NEWTOWN CREEK STP UP	\$112,331,279
NYCMWFA NEWTOWN CREEK STP UP	\$169,975,528
NYCMWFA NEWTOWN CREEK STP UP	\$140,983,576
NYCMWFA NEWTOWN CREEK STP UP	\$42,212,389
NYCMWFA NEWTOWN CREEK STP UP	\$361,199,252
NYCMWFA NEWTOWN CREEK STP UP	\$589,360,645
NYCMWFA PUMP STATIONS CSO [CSO]	\$183,867,577
NYCMWFA CONEY ISLAND CREEK CSO	\$69,107,016
NYCMWFA CONEY ISLAND CREEK CSO	\$48,351,415
NYCMWFA NYC-WATERSHED NPS 319	\$116,225,648

**Final Intended Use Plan Drinking Water State Revolving Fund**

**October 1, 2015- September 30, 2016**

**<http://www.efc.ny.gov/Default.aspx?tabid=108>**

**NEW YORK CITY**

Croton Filtration Plant (Phase 11 of 16479),	\$1,200,000,000
3rd City tunnel and shafts, crit redund, dist press,	\$470,000,000
Catskill& Delaware UV Disinfection, Treatment Plant	\$1,400,000,000

**STATE OF CALIFORNIA, FISCAL YEAR 2015-2016**

**Clean Water State Revolving Fund Intended Use Plan**

**[www.waterboards.ca.gov/board\\_info/agendas/2015/jun/060215\\_8\\_draft\\_sf1516\\_cwsrf\\_iup.pdf](http://www.waterboards.ca.gov/board_info/agendas/2015/jun/060215_8_draft_sf1516_cwsrf_iup.pdf)**

Sacramento Regional County Sanitation District Echo Water Project	\$174,380,875
Sacramento Regional County Sanitation District Echo Water Project	\$65,426,778
South Coast Water District Tunnel Stabilization & Sewer Rehabilitation	\$102,560,000
Hi-Desert Water District Wastewater Treatment and Water Reclamation	\$142,349,314
City of Malibu Civic Center Wastewater Treatment & Recycling Facility	\$41,900,000
Santa Margarita Water District Trampas Canyon Recycled Water	\$47,450,000
City of North Valley Regional Recycled Water Program	\$96,617,856
Monterey Regional Water Pollution Control Agency Groundwater	\$82,000,000
Eastern Municipal Water District Recycled Water Supply Optimization	\$114,031,280
Los Angeles, Advanced Water Purification Facility	\$451,000,000
Sacramento Regional County Sanitation District Echo Water Project	\$59,408,652
Sacramento Regional County Sanitation District Echo Water Project	\$711,032,393
City of San Luis Obispo Water Resource Recovery Facility Expansion	\$68,000,000
Ventura County Waterworks District No. 1	\$50,000,000
San Jose, City of Digester and Thickener Facilities	\$86,350,000
Water Replenishment District of Southern California Groundwater	\$80,000,000
Upper San Gabriel Valley Municipal Water District Indirect Reuse	\$65,000,000
Los Angeles, City of Hyperion Treatment Plant Membrane	\$460,000,000
Palmdale Water District Palmdale Regional Groundwater Recharge	\$130,000,000
Sacramento Regional County Sanitation District Echo Water Project	\$484,585,422

**ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

**Ernie Fletcher**  
Governor

Department for Environmental Protection  
Division of Water  
14 Reilly Road  
Frankfort, Kentucky 40601  
Phone: (502) 564-3410  
Fax: (502) 564-0111  
[www.water.ky.gov](http://www.water.ky.gov)

**LaJuana S. Wilcher**  
Secretary

**News Release**

**Contact: Julie Roney**  
**(502) 564-3410**

**DRINKING WATER NOTICES NO REASON FOR CONSUMER CONCERN**  
*They reflect careful government standards for water purity*

FRANKFORT, Ky. (May 9, 2005) – If you received a notice from your water company about “disinfectant byproducts” in your drinking water, you’re not alone. Thousands of Kentuckians are receiving the notices, which were required under standards set by the U.S. Environmental Protection Agency (EPA).

Recently, many water systems in the state were required to notify customers that maximum contaminant levels (MCLs) for certain disinfectant byproducts (DBPs) had been exceeded. The notices, intended as advisories, included language about potential health effects from consuming water with elevated levels of these substances.

The notifications used specific language and a format dictated by EPA, causing confusion among some consumers.

**What it's all about**

To be made safe for drinking, water is disinfected during treatment. Without disinfection, bacteria, viruses and microbes would cause disease and possibly death. Dysentery, cholera and typhoid fever once were constant threats. Public health officials say chlorine treatment of drinking water is one of the most significant public health achievements of the past century.

However, disinfectants such as chlorine, chloramine, chlorine dioxide, ozone and bromine can react with substances that occur naturally in water at its source, such as decaying leaves or other organic matter. The reaction creates DBPs such as trihalomethanes (THMs) or haloacetic acids (HAAs). The EPA determined that long-term exposure to DBPs was potentially cancer-causing and thus set maximum contaminant levels (MCLs) for water systems to meet. The standards were set cautiously and conservatively.

The MCL for THMs was set in 1970 and revised in 1998; the new rule also added monitoring for HAAs. The new rules became effective for all surface and groundwater systems on Jan. 1, 2004, regardless of population size. Water systems are required to monitor for THMs and HAAs every three months. At the end of 2004, quarterly monitoring was

-more-



**DRINKING WATER NOTICES NO REASON FOR CONSUMER CONCERN – page 2**

averaged and compared with the MCL. If the running annual average showed the level to be over that set by EPA, a water system was to examine its treatment techniques to get into compliance. It also was to notify the public of its monitoring results. Those averages and notifications became available in March.

Eight percent of large water systems – systems that served more than 10,000 people and treated surface water – were out of compliance in 2004, down from 37 percent in 2002. Most are taking further steps to control THM and HAA.

Smaller surface water systems and all groundwater systems began to comply with lower limits in 2004. As this was the first time that these smaller surface water systems monitored for THMs and HAAs, some had not changed their treatment processes enough to lower these levels and thus were out of compliance at the end of 2004. Of the approximately 208 groundwater systems and 103 small surface water systems, none of the groundwater systems exceeded the new MCL and 25 percent of the surface water systems did exceed them. That 25 percent was required to notify the public for the first time about this new monitoring. Those small surface water systems are now examining their treatment processes and preparing to make the changes necessary to return to compliance.

The health effects of DBPs are unclear. Some studies have shown no problems. Others have indicated a slightly higher incidence of bladder and colon cancer in areas where drinking water has been chlorinated. Though the science is uncertain, EPA has taken precautions by establishing MCLs. To experience health effects from water with elevated DBP levels, a person would have to drink two liters daily for 70 years of water containing elevated levels of these substances. Risks from not disinfecting are immediate, however.

For information about DBPs, contact the Drinking Water Hotline, 1-800-426-4791, or see these Web sites:

<http://www.epa.gov/safewater/hfacts.html>. Click on Disinfection Byproducts.

<http://www.epa.gov/safewater/mcl.html>. Scroll down to Disinfection Byproducts.

<http://www.epa.gov/safewater/pws/pn/handbook.pdf>. This site contains the handbook that tells how water systems are to notify their customers and exactly what language they must use.

Check out EPA's Safewater site, <http://www.epa.gov/safewater/>, for more information. Also see information on disinfection byproducts on the Kentucky Division of Water's Drinking Water Web site at <http://www.water.ky.gov/dw/profi/tips/Disinfection+Byproducts.htm>.

**What's being done and what consumers can do**

Water systems, with assistance from DOW when needed, will be adjusting treatment processes. Customers of water systems that sent notices need not switch to bottled water. THMs dissipate readily from water. THMS and HAAs both are removed when water is heated, such as for making coffee or tea.

For cold drinking water, or in making beverages with cold water, allowing the water container to sit uncovered at room temperature for several hours before refrigeration will allow much of the THM concentration to dissipate.

People with special health needs or concerns should contact their physicians for additional precautions.



TO: **Deputy Assistant Administrator Ken Kopocis, Office of Water**  
CC: Senate Subcommittee on Fisheries, Water, and Wildlife  
Senate Subcommittee on Regulatory Affairs and Federal Management  
House of Representatives Subcommittee on Energy and Environment  
House of Representatives Subcommittee on Government Operations  
FROM: NRWA Regulatory Committee  
DATE: October 2, 2015  
RE: Water Policy for the National Water Safety and Quality Programs

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The National Rural Water Association (NRWA) is the non-profit association of the federated state rural water associations with a combined membership of over 30,000 small and rural communities. NRWA is the country's largest water utility association and the largest community-based environmental organization. Our state rural water associations are non-profit associations governed by board members elected from the membership.

We appreciate the agency's effort to improve and enhance federal water regulations to be reasonable for small and rural communities.

Our member utilities have the very important public responsibility of complying with all applicable U.S. Environmental Protection Agency (EPA) regulations and for supplying the public with safe drinking water and sanitation every second of every day. Most U.S. water utilities are small; 94% of the country's 51,651 drinking water supplies serve communities with fewer than 10,000 persons, and 80% of the country's 16,255 wastewater supplies serve fewer than 10,000 persons. Small and rural communities often have difficulty providing safe, affordable drinking water and sanitation due to limited economies of scale and lack of technical expertise. Similarly, when it comes to providing safe water and compliance with federal standards, small and rural communities have a difficult time due to their limited customer base. This is compounded by the fact that small and rural communities often have lower median household incomes and higher water rates compared to larger communities. As a result, the cost of compliance is often dramatically higher per household.

NRWA's Regulatory Committee (members attached) is chartered to make policy recommendations to the entire association. Over the past year, the Committee has identified a number of policy improvements to the national drinking water program that have been approved and adopted by NRWA. The purpose of this memorandum is to identify the policy recommendations that could be implemented by EPA under the

agency's executive authority (i.e. without a change in federal water statutes) and urge you to adopt these policies to improve the national water safety and quality programs. We believe certain current EPA policies are unnecessarily alarming the public regarding the safety of its drinking water, are causing the public to unnecessarily avoid public drinking water, and are unnecessarily costly for the public. We hope you can implement modifications to current EPA regulatory policy to improve the national water program, enhance public health and better protect the environment. We look forward to working with you on these suggestions.

### **NRWA Water Policy Recommendations**

**Senator Wicker Tier 2 Public Notification Issues:** The Senator's June 11, 2015 letter to you inquires if any Tier 2 public notices (PN) should be eligible for e-reporting or annual notice (similar to Tier 3 PNs). Your July 29, 2015, response to Senator Wicker did not answer this question. NRWA urges the agency to consider reclassifying disinfection by-products (DBPs) MCL violations as Tier 3 public notices or allow for e-reporting of the current DBP Tier 2 public notices. For fiscal year 2014, EPA lists 2,135 maximum contaminant level (MCL) violations of DBPs standards: 477 of those exceedances include no recorded level; 110 of the 416 violations for the haloacetic acids standards (HAA5) are for exceedances equal to or less than 5 parts per billion (PPB); and 174 of the total 1,252 violations for total trihalomethanes standards (TTHMs) are for violations equal to or less than 5 PPB. It is our understanding this category of DBP violations requires Tier 2 PN (direct mailing of the violation to consumers with mandated alarming language specified by EPA) which often results in alarming the public to the point they are afraid to drink the water. For example, after a DBP violation of one-half of a part per million, the local news station in Menominee, Michigan (WFRV, 4/3/2015) reported, *"Residents in Menominee, Michigan are Questioning the Safety of their Drinking Water... Last week, [a consumer] got a notice in the mail saying the Menominee city water system recently violated a drinking water standard. The supply tested high for trihalomethane, a disinfection by-product. 'It was kind of a slap in the face when I got this and I thought, here I'm paying for a commodity and I'm not really sure that it's safe,' explained [the consumer]. 'I don't think I'm the only one in the city that feels that way... I'm actually looking into getting a whole house water filtration system,' she added. 'I don't trust our water anymore...'"* What the public wants to know most is whether there is a public health significance difference between 60 parts per billion and 65 parts per billion of THMs occurring in their water. Some states have been compelled to issue additional public notices to warn consumers of the EPA mandated warnings (Kentucky Department for Environmental Protection, May 9, 2005). The EPA reply to Senator Wicker also states that the Safe Drinking Water Act (SDWA) does not allow for consideration of *de minimis* public health risks above the MCLs. Regarding this conclusion, we urge the agency to review SDWA variance and exemptions sections that authorize the exceedance of MCLs under certain circumstances and only if the exceedance "will not result in an unreasonable risk to health." Senator Wicker's letter clearly raises this concern.

**De Minimis Violations and EPA Enforcement Policy:** The agency is implementing a new approach for enforcement targeting under the SDWA for public water systems. According to EPA, "*The new approach includes a revised Enforcement Response Policy (ERP) and new Enforcement Targeting Tool (ETT), designed to identify public water systems with violations that rise to a level of significant noncompliance by focusing on those systems with health-based violations and those that show a history of violations across multiple rules... This system-based approach uses a tool that enables the prioritization of public water systems by assigning each violation a 'weight' or number of points based on the assigned threat to public health. Points for each violation at a water system are added together to provide a total score for that water system. Water systems whose scores exceed 11 are considered a priority system for enforcement.*" A simple analysis of some of the "worst" violators shows no correlation to severity of violation and public health threats. For example, Virginia's ETT database lists small communities with some of the highest or worst ETT scores in the country:

Public Water System Name	ETT Score	Pop.	On Path to Compliance?	SDWIS
HOBSON ARTESIAN	100	70	Not on Path	Fluoride 4.7 PPM
RESCUE WATERWORKS	99	203	Not on Path	Fluoride 4.4 PPM
BIRDSONG WATER COMPANY	97	71	Not on Path	Fluoride 5.3 PPM
WILLING WORKERS CLUB	59	31	Not on Path	Fluoride 4.1 PPM
CAPTAINS COVE SUBDIVISION	47	840	Not on Path	Arsenic 13 PPM
HOLLAND SUBDIVISION	37	405	Not on Path	No record
SPRINGFIELD DOWNS	36	120	Not on Path	Fluoride 5 PPM
LONGVIEW ACRES	36	168	Not on Path	Fluoride 4.9 PPM
CHERRY GROVE ACRES	36	108	Not on Path	Fluoride 4.8 PPM
BARREN SPRINGS WATER	33	146	Not on Path	Monitoring
MARSH RUN MOBILE HOME	31	1128	Not on Path	Arsenic 11 PPM
SHENANDOAH UTILITY	30	55	Not on Path	Monitoring
CRICKET HILL APARTMENTS	27	88	Not on Path	Monitoring

We urge the agency to modify its enforcement policy to better correlate for threats to public health, target technical assistance, acknowledge the limitation of funding for disadvantaged communities, and consider *de minimis* risks to public health. One of the "worst" violators of the SDWA (i.e. highest ETT score) is Rescue Waterworks in Virginia whose water has less than one-half a part per million of fluoride, a naturally occurring element in groundwater, above the MCL. Enforcement is not the appropriate approach to small communities in non-compliance that simply don't have the resources to afford compliance and have a violation of questionable health concerns. None of the non-compliance is a result of disregard for the rules; it is always a result of lack of resources. This can be especially acute in economically disadvantaged communities, when compliance is very costly, or when the violation is not actually related to public health. Most all SDWA violations that EPA identifies as "health based" are for naturally occurring substances, for total coliform which EPA no longer considers a violation or health threat, or a result of disinfecting the water. For fiscal year 2014, EPA lists 9,906 total health based violations: 2,648 violations are for total coliform (TCR); 1,176 violations are for the

arsenic rule, 297 of which are for an exceedance equal to or less than 2 parts per billion (PPB); 232 violations are for the fluoride rule, 221 of which are for an exceedance equal to or less than 2 parts per million (PPM); 331 violations are for the gross alph standard, 204 of which are for an exceedance equal to or less than 10 pCi/L; 428 violations are for radium 226/228, 206 of which are for an exceedance equal to or less than 2 pCi/L; 262 violations are for the uranium standard, 58 of which are for an exceedance equal to or less than 10 picocuries per Liter (pCi/L); and 2,135 violations are for disinfection by-products standards, many of which are only slightly above the MCLs. Any modification in enforcement policy should include a workable variance policy.

**Total Organic Carbon (TOC):** One of the more frustrating requirements to operators of surface water treatment plants is the total organic carbon (TOC) percentage removal requirement. Compliance with this requirement is not only uncertain, but the costs of monitoring, reporting, and public notice are substantial. And then there is the public's reaction to the public notice for a rule violation that is not related to adverse health effects. Analysis conducted by the Kansas Rural Water Association finds that the level of precursors, that is organics as measured by TOC, is not an appropriate compliance surrogate. There are treatment plants that meet the THM and HAA MCLs but do not meet the TOC percentage reduction requirement. There are also treatment plants that do not meet these MCLs but do meet the TOC percentage reduction requirement. So there is not necessarily a correlation between MCL compliance and meeting the TOC percentage reduction requirement. Also, Kansas Rural Water Association found there are many situations where a treatment plant will have both a higher TOC concentration and lower THMs and HAAs in the drinking water than another plant source that has lower TOC concentrations and higher THMs and HAAs. We urge the agency to modify the rule to allow for TOC to be an operations measure but not a compliance indicator.

This issue of correlation, along with the concern about regulating a substance that has not been identified as a public health risk according to the Safe Drinking Water Act (1414(b)(i)), was initially raised by Senator Inhofe (Comments to EPA, 9/7/2005). Reform of the current public notice requirement for TOC violations would likely result in the public receiving more accurate information on the safety of their water. Consider the example of the City of Atchison, Kansas, where a TOC violation public notice motivated consumers to find alternatives to the public water and inspired the following comment from a consumer, "*The Atchison water system is kind of notorious for not being the best, so this is our effort to bring healthier solutions to the school.*" (The Circuit, 2/10/2012)

**Point of Use (POU) Technology:** The federal standards promulgated under the SDWA are contingent upon feasible technology identified by the agency available to achieve compliance (§1412(b)(4)(E), *"Each national primary drinking water regulation which establishes a maximum contaminant level shall list the technology, treatment techniques, and other means which the Administrator finds to be feasible for purposes of meeting such maximum contaminant level, but a regulation under this subsection shall not require that any specified technology, treatment technique, or other means be used for purposes of meeting such maximum contaminant level."* Under §1412(b)(4)(E)(ii) of the SDWA, Congress determined that point of use (POU) technology does achieve compliance with federal standards, *"The Administrator shall include in the list any technology, treatment technique, or other means that is affordable, as determined by the*

*Administrator in consultation with the States, for small public water systems... and that achieves compliance with the maximum contaminant level or treatment technique, including packaged or modular systems and point-of-entry or point-use treatment units."*

Contrary to the SDWA, some states prohibit, discourage or will not approve the use of POU technology for compliance with federal standards. We urge the agency to provide a "safe harbor" from enforcement of federal standards for any public water system not provided all the available compliance options in the SDWA including POU technology. Furthermore, we urge the agency to make this a primacy requirement for states requesting primacy.

**Public Sensitive Water Utility to the Internet:** NRWA supports the May 26, 2015, Association of Metropolitan Water Agencies' (AMWA) letter to you regarding the "concerns about EPA making water treatment plant location data more readily available for public access via the internet." Similar to AMWA's position, NRWA is concerned about the posting of information on the internet that could increase risk to water utilities because it conveys a message that the information is not sensitive and that protecting it is not necessary.

**Source Water Protection:** In response to recent crises such as Charleston, West Virginia, we urge the agency to adopt new initiatives to enhance source water protection that allow for some immediate protection and do not require any grand spending program or any expansion of federal unfunded mandates. This suggestion relies on the advancement of information technologies to educate and empower the public to protect their own resources. In a novel governmental experiment a few years ago, Congress provided a small package of funding to the state agencies that protect ground water to design and publish on the internet a public disclosure database of all chemicals used in hydraulic fracturing events. This experiment proved to be widely successful. As it was created by the states, it was more accountable to state priorities and supported by local governments. For a small federal investment, this data-system could begin to publicly disclose all watersheds, all potential threats within those watersheds, the list of all communities that have adopted protection plans, copies of each protection plan, and a grading system for communities taking action. Communities could populate the data-system with their localized information. All of this would provide direct access to environmental data, governmental response information, and governmental accountability to the public. In addition, it would create a climate of peer pressure or polite competition for communities to highlight their initiatives. We can all agree that every city and state thinks it is doing the best job, and this system would allow the public to make sure their claims are accurate. Large communities and states would likely have the resources to complete plans and showcase their successes. Additional technical assistance could be provided to assist smaller communities that lack technical resources; 94% of community drinking water systems serve a population of fewer than 10,000 people.

**Cyber Security Implementation in Water Utilities:** Based on recommendations from the Department of Homeland Security (DHS - Sophisticated Cyber Threat Actors Target Industrial Control Systems), NRWA has been promoting that water systems should: isolate ICS networks from the internet, minimize network exposure for all control systems

devices, locate control system networks and devices behind firewalls, isolate control systems from the business network, employ secure methods such as Virtual Private Networks, remove, disable, or rename any default system accounts wherever possible, and implement account lockout policies in the coming weeks. We urge you to initiate a partnership with small and rural communities to secure the country's drinking water and sanitation supplies from cyber attacks. By collaborating with the water sector and utilizing the existing network that water supplies rely on for security initiatives and education, the Cybersecurity Framework could: (1) rapidly assess each water supply's efficacy in protecting its cyber infrastructure, (2) develop reasonable protocols to enhance protection, (3) provide assistance to any inadequate cyber protection plan, and (4) document the state of cyber-protection in all water supplies. Upon adoption/completion of a cybersecurity plan, each community will have a documented security plan that could be verified and open to review as appropriate. Federal, state and local authorities could easily track which communities have taken the initiative to secure their cyber infrastructure. The contents of each plan could be combined with each community's vulnerability assessment and emergency response plans. Local support and responsibility is essential to ensure security protection because only local experts can identify the most vulnerable elements in the community and detect immediate threats. A national collaboration on water cybersecurity should result in communities enthusiastically focusing on enhancing local security based on local risks.

The existing Risk Based Data Management System (RBDMS)/FracFocus information system should be used to launch this effort for a water "CyberFocus" for the water sector to make all water utility cyber-plans available to the public, continually updated, and quantifiable. DHS' Sophisticated Cyber Threat Actors Target Industrial Control Systems would be the foundation of the water utility cyber-security plans. Any additional data could be collected and shared with the feds for their analysis similar to what RBDMS is currently sharing with the Department of Energy for energy analysis.

**Unregulated Contaminant Monitoring:** Small and rural communities have been frustrated by the confusion that has resulted from EPA's requirement to list monitoring reports from their Unregulated Contaminant Monitoring (UCMRs) in their Consumer Confidence Reports (CCRs). We urge the agency to allow public water systems to make UCMR results publicly available (online) but not part of the consumer confidence reports. To put this request in context, all 70 PWSs sampled to date in South Carolina during UCMR3 had UCMR detections and thus require public notification. Many of these systems had detects found in each sample at every sampling point triggering numerous notifications, thus creating a lengthy CCR regardless of the absence of violations in their routine monitoring and operations. Specific to strontium, 68 of the 70 systems sampled had detects of strontium at a range of .31–1400 ug/L. Therefore no systems detected strontium under UCMR 3 at concentrations above the current HRL of 1500 ug/L. However, all of these systems were required to report strontium detects on their CCR. The following is excerpted from the statement that was submitted by Charles Gray of the Chesterfield County Rural Water (South Carolina) for consideration during the recent UCMR forum in June, 2014, "*We found positive detects for the following substances: Hexavalent Chromium (.058 – 1.0 ug/l), 1,4 Dioxane (0.123 – 0.589 ug/l), Strontium (12 – 47 ug/l), Vanadium (0.12 - 0.45 ug/l), Chlorate (100 – 130 ug/l) and 1, 1 Dichloroethane (38 – 38 ug/l)... These are, by definition, unregulated elements and/or*

*compounds found in water samples. The term "contaminant" has a negative connotation for customers, when another, less alarming and more accurate term could be used if a utility is going to be required to report findings... It is unclear and apparently undefined as to the concentration of the elements or compounds that may cause some detrimental impact on public health. As such, it seems reporting these findings without clear determination of what accepted levels are considered unsafe concentrations is premature and unwarranted. It also leaves the public without the information they most want to know; what levels of these substances are safe or not safe. We don't think EPA should override the locally preferred public disclosure policy without providing this basic information to the public... Consumer Confidence Reports are intended to inform the public about the safety of their drinking water and system operation. A system can have flawless performance and meet all the guidelines of the Safe Drinking Water Act (SDWA), and yet have "hits" on unregulated contaminants and appear to consumers that issues exist with system operations... Does the SDWA mandate that unregulated contaminants be reported in CCRs? If not, why was this required? If this reporting is not required by EPA, water utilities should be allowed to publicly disclose the information in a manner more reflective of public health relevance."*

**Regulation of Storage Tanks:** EPA is proposing new regulations for "Finished Water Storage Facility Inspection Requirements Addendum to the Revised Total Coliform Rule" (a.k.a. Inspection of Finished Drinking Water Storage Facilities NPDWR, Docket No.: EPA-HQ-OW-2008-0878). According to the agency, *"EPA is planning to propose an addendum to the Revised Total Coliform Rule (RTCR) to strengthen public health protection by including finished water storage facility inspection (SFI) requirements. In the preamble to the July 2010 proposed RTCR (75 FR 40926)." NRWA urges the agency to withdraw this proposal for the following reasons: First, a uniform regulation for tanks will result in unintended consequences and unnecessary requirements in some communities and discourage local officials from staying vigilant for threats unique to their storage and distribution system. Encouraging local governments to be vigilant in monitoring their systems would be more effective because each community's threats/vulnerabilities are unique. Second, the SDWA does not authorize such a rule; it authorizes rules such as National Primary Drinking Water Regulations (NPDWRs) only after a finding of contamination, not for prevention of contamination unless explicitly authorized like the Surface Water Treatment Rule or Groundwater Rule. Third, many tanks don't need consultant-type inspections. Local education and technical assistance would be more cost effective, locally supported, and protective. Finally, NRWA's representative of the Federal Advisory Committee reviewing the Revised Total Coliform Rule (RTCR), David Baird, commented that this proposal "violates the agreement in principle that NRWA and EPA negotiated and agreed to implement... Tank inspections are addressed by the systems as part of sanitary surveys and routine system operation and maintenance. The RTCR was specifically designed so that when there was a positive coliform hit, the system would need to investigate (through a self assessment) and not just rely on up and downstream samples as was the case under the old rule. Ultimately, the systems would investigate potential sources of the positive hit based on the design and operation of their individual systems. This was considered to be an improvement over the old rule, because systems had to look for the source of positive hit. It was up to the water system as to how they conducted the assessment.*

*This proposed action by is moving into the territory of a 'Distribution Rule.' At the beginning of the RTCR process, EPA presented information as to why a Distribution Rule should be developed as part of the RTCR. The RTCR committee clearly rejected any Distribution Rule component. EPA attempted to bring this up during the 2 years of FACA meetings and the committee continued to oppose."*

**Watershed Pollution Trading Policy:** Most all small communities comply with modified National Pollution Discharge Elimination System (NPDES) permits influenced by EPA's Total Maximum Daily Load TMDL program without ever considering a trading component that could be more environmentally beneficial and more economical (most all of these small communities are not aware of the trading option - and most states don't encourage trading). There is currently no successful effort, incentive, or locally available triggering authority to allow for a trading option or even trading consideration to occur. Legal challenges in federal/state court by small communities to allow for trading compliance schemes are not possible in these situations because small communities can't afford the legal costs, don't know it is possible, and don't understand that process.

As more TMDLs and state nutrient plans are implemented, we expect to see more communities adversely impacted that could benefit from the trading option. This concept also applies to recent agency initiatives to reduce nutrient pollution in addition to NPDES compliance such as initiatives emanating from the recent Toledo, Ohio crisis. A number of our members within the Chesapeake Bay TMDL are interested in a trading option that would expand local digester capacity to treat more agriculture and dairy livestock waste and convert the waste to renewable energy and benign solids. Such a proposal would reduce nutrients to the Chesapeake Bay more than the prescribed reductions in their point-source effluent for less cost (the bulk of the nutrient pollution in the waters is coming from the farms not the cities). However, there is no available process for these communities to adopt such an innovative compliance alternative. One municipality (Cortland, New York) wants to increase the capacity of their digester and consider changing the location so that it could treat animal waste from the surrounding farms at no cost to the farmers (some of whom have non-working digesters or land-applying manure). The resulting energy could pay for the transportation of the animal manure.

We urge the agency to adopt a new trading policy to allow for some type of third party certification (i.e. conservation districts) to authorize, calculate, or propose trading schemes. This would assist small communities and state agencies by removing the administrative burden of proposing trading programs. Additionally, every community facing more stringent NPDES compliance due to TMDLs should be provided an opportunity to propose a trading compliance option before an enforcement action is taken.

**Affordability and Environmental Justice:** In order to prohibit small communities from utilizing economical treatment options (so-called small system variance technologies) under the Safe Drinking Water Act – the EPA must make a finding that their rules are "affordable" [(42 U.S.C. 300g-1(b)(15)(A)]. To determine affordability, EPA adopted a policy that families can afford annual water rates of 2.5% of median household income (MHI). NRWA has commented to EPA that the use of MHI computed as a national

aggregate as the sole metric for determining affordability has many problems and should be revised to be reasonable for small communities and allow access to affordable compliance treatment options. After a Congressional directed review, EPA concluded the following in March, 2006, "Some stakeholders have argued that the current criteria are too stringent and fail to recognize situations in which a significant minority of systems within a size category may find a regulation unaffordable. After seven years of experience with the current criteria, EPA agrees it is time to consider refinements to address the situations of communities with below average incomes or above average drinking water and treatment costs (FR p.10671 – March, 2007)." EPA has not finalized a new policy after making this declaration in 2006. EPA has stated that the purpose of their affordability determination is to "look across all the households in a given size category of systems and determine what is affordable to the typical, or middle of the road household" [Federal Register (Jan. 22, 2001) 6975- 7066]. EPA's MHI standard does not consider the quantity, concentration, rural demographics, and financial abilities of low-income families or disadvantaged populations to afford the rule as required by the Agency's Environmental Justice policy [Executive Order 12898].

**Lead and Copper Rule Revisions:** We appreciate the invitation from EPA for John Sasur of Three Rivers Fire District, Massachusetts to represent small and rural communities on the National Drinking Water Advisory Council Lead and Copper Rule (LCR) Working Group. NRWA's priority issue in any new LCR is an alternative to in-home consumer monitoring. The current in-home monitoring is problematic (unworkable, unreliable, error-prone, and not an indicator of contamination) and needs to be replaced with a new scheme.

Thank you for your consideration of our concerns. Please contact NRWA staff member, Mike Keegan <keegan@ruralwater.org> with any questions.

Sincerely, NRWA Regulatory Committee



John O'Connell (Chair)  
City of Cortland Wastewater Treatment,  
New York



Jim Mackie  
Willingboro Municipal Utilities Authority,  
New Jersey



George Crum  
Pennsylvania Rural Water Association



Bob Freudenthal  
Tennessee Association of Utility Districts



Gary Williams  
Florida Rural Water Association



Jill Miller  
South Carolina Rural Water Association



John Sasur  
Three Rivers Fire District,  
Massachusetts



George Hanson  
Chesapeake Ranch Water Company,  
Maryland



Wilmer Melton  
City of Kannapolis, North Carolina



Earl McKinney  
Wyoming Association of Rural Water

Daniel Wilson  
North Carolina Rural Water Association

**Addendum (March 17, 2016)**

**Emergency Generators and Peak Shaving Program:** The 2010 National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines ("RICE NESHAP") specified that small emergency electric generating units used for peak shaving must meet the emission standards for non-emergency engines. An emergency generator that is compliant with the new rule (tier 4 generator) is double the cost of the status quo generators (tier 3 generator). For example, a tier 3-150 kilowatt generator costs approximately \$50,000 and a tier 4 unit of similar size costs around \$100,000.

The EPA found that the operation for peak shaving does not come under the definition of emergency use as it is designed to increase capacity in the system rather than responding to an emergency situation such as a blackout or imminent brownout. The rule allows for emergency units to operate up to 100 hours-per-year or more for testing, maintenance, etc., including 50 hours-per-year for non-emergency situations – but specifically not for peak-shaving purposes. Peak shaving programs involve minimal hours of operation, thereby having the potential not to add to the allowed 100 annual hours of operation contained in the rules. Therefore, continuing the use of peak shaving programs would not cause additional public health risks or environmental harm beyond those already contemplated in the final rule.

According to the National Rural Electric Cooperative Association (NRECA), "*Elimination of peak-shaving programs, however, would require the procurement of additional central station capacity and potentially the addition of transmission and distribution line capacity to service the demand increase. While peak-shaving programs do not generate income for the distribution cooperative, they do produce economic benefits by reducing the level of demand on their electric power suppliers, resulting in reduced demand costs. These reduced costs, in turn, are shared with the owners of these small emergency generating units that participate in peak shaving programs: a win-win arrangement that helps hold down power costs for the owners of these units, as well as for the cooperatives other consumer-owners.*"

In light of the minimal environmental effects and significant benefit from having these small stationary emergency units available, the restriction of the operation of these emergency units for peak-shaving and demand reduction programs should be eliminated. This change would not result in any additional run-time above the 100 hours of operation that is already provided for in the rule.