



TESTIMONY OF
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SCOTT DEPOT, WEST VIRGINIA
ON BEHALF OF
**PUTNAM PUBLIC SERVICE DISTRICT,
THE WEST VIRGINIA RURAL WATER ASSOCIATION, AND
THE NATIONAL RURAL WATER ASSOCIATION**
BEFORE THE
THE U.S. SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
FEBRUARY 8, 2017

Good Morning Chairman Barrasso and Members of the Committee. My name is Mike McNulty, and I am the general manager of the Putnam Public Service District (PSD) which is a state chartered drinking water and wastewater utility just outside of Charleston, West Virginia.

Before commenting on water infrastructure and rural America, I want to say thank you to our state's junior Senator, Shelley Moore Capito, for her assistance in improving West Virginia's rural water infrastructure. My county recently was able to construct a new \$16 million dollar wastewater utility expansion that allowed us to extend service to 400 new homes and businesses. This is a very important project for our county and your assistance, Senator Capito, was essential in making this work and thank you.

I am representing all small and rural community water and wastewater supplies today through my association with both the West Virginia 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.

- In West Virginia, 444 of the total 468 community water systems serve a population of fewer than 10,000 persons.
- In Wyoming, 310 of the total 319 community water systems serve a population of fewer than 10,000 persons.
- In Delaware, 196 of the total 213 community water systems serve a population of fewer than 10,000 persons.
- And in Maryland, 429 of the total 470 community water systems serve a population of fewer than 10,000 persons.

When thinking about national water infrastructure proposals, please remember that most water utilities are small and have more difficulty affording public water service due lack of population density and lack of economies of scale.

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, 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 2017, there are rural communities in the country that still do not have access to safe drinking water or sanitation due to the lack of population density or lack of funding – some in my county. Each day, we have families driving their pick-up trucks to our central filling station to fill up large plastic storage containers to “haul” the water back to their remote and isolated homes. Included with my written testimony are recent news profiles of communities that lack basic drinking water access (Appendix A). My water utility and our rural water association's mission has been to expand water service to these communities and rural areas – often for the first time. The delivery of drinking water and sanitation to rural America has been one of the great public health accomplishments of the second half of the twenty-first century.

This committee is very important to rural and small town America; every federal dollar that has been granted to the many thousands of small towns to build, expand, and maintain their drinking water and wastewater infrastructure through the state revolving funds was authorized by this committee. Also, every federal regulation under the Safe Drinking Water or the Clean Water Act was likewise authorized by this committee. We are grateful to be able to testify today and grateful for the numerous opportunities this committee has provided rural America to testify and be included in the crafting of federal water and environmental legislation.

Over the last 50 years, through the combined financial assistance of the state revolving funds and the U.S. Department of Agriculture's rural water grant and loan initiative that has exceeded 100 billion dollars, the country has made great advancements in the standard of living in rural America. Millions of rural Americans now have access to safe public or “piped” drinking water that their parents did not have. Thousands of rural communities now have public sewer or wastewater systems that have allowed for elimination of millions of questionable septic tanks, cess-pools, straight pipes, or worse. This rural water infrastructure development has been the engine of economic development and agricultural technology advances in rural communities, and it has provided for dramatic improvements to the environment and public health.

President Trump has made improving the county's infrastructure, including water and wastewater, a priority. We are grateful for that.

My main point here today is to tell you that if rural and small town America is not specifically targeted in the legislation that would authorize and fund a new water infrastructure initiatives, the funding will by-pass rural America and be absorbed by large metropolitan water developments due the following two reasons:

1. Small community water infrastructure projects are more difficult to fund because they are smaller in scale – meaning numerous, very complicated applications have to be completed and approved compared to one large project. This is compounded by the reality that small communities lack the administrative expertise to complete the necessary application process – and perhaps the political appeal of some large cities.
2. Due to lack of economies of scale and lower median household incomes in rural America, water infrastructure is often less affordable (i.e. a much greater cost per household). This means that a water infrastructure project poses a greater financial risk compared to the metropolitan project and, very importantly, requires some portion of a grant, not just a loan, to make the project feasible. The higher the percentage of grants required to make a project work results in less money repaid to the infrastructure funding agency and a correlating diminution of the corpus fund.

To make sure any water infrastructure initiative helps rural and small town America, we urge Congress to consider the following six 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. 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 more rural low-income communities with contaminated drinking water (Appendix A).

- 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 most 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 correlating expensive wastewater treatment plant upgrades. These communities should be a priority in targeting all EPA wastewater funding subsidies. Next year, the City of Casper, Wyoming could be facing a potential \$50 million dollar cost to keep the city’s wastewater treatment plant in compliance with the TMDL on the North Platte River. Federal compliance cost for the EPA drinking water rules, many for naturally occurring elements in groundwater, can be a million dollars in communities with fewer than a thousand people. I have attached a few recent examples to my testimony (Attachment B). EPA’s most recent noncompliance reporting data for drinking water regulations shows 9,949 communities in noncompliance (Attachment C); most all of these communities are struggling to achieve federal compliance and avoid fines.
 - EPA lists 444 communities in violation for the arsenic standard; all have a population of fewer than 25,000 persons; 98% have a population of fewer than 10,000 persons; and 85% have populations under 1,000 persons.
 - EPA lists 1,374 communities in violation for the most recent disinfection byproducts rule; 1,310 have a population of fewer than 25,000 persons; and 94% have a population of fewer than 10,000 persons.
 - EPA lists 76 communities in violation for naturally occurring fluoride in their drinking water; all but 2 of these communities have a population of fewer than 10,000 persons; and 80% of these communities have a population of fewer than 500 persons (Attachment C).
- Third, a small percentage of water funding programs should be set-aside for technical assistance and assistance in complete the applications for water infrastructure funding. 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. Our recent letter to EPA Administrator designee Scott Pruitt explains this concept in detail (Attachment D).

- 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.
- Fifth, allow infrastructure funds some ability to provide grants – not just loans. Commonly, low-income communities do not have the ability to pay back a loan, even with very low interest rates, and require some portion of grant or principal forgiveness funding to make a project affordable to the ratepayers.
- Sixth, a minimum portion of the funds should be set-aside for small and rural communities. This ensures that any infrastructure program must set-up a process for dealing with small and rural communities. Once established, local pressures and priorities will determine the actual portion directed to small systems which we expect will often be greater than the minimum prescribed.

My water utility, the Putnam Public Service District, in Putnam County, West Virginia provides a good example of what water infrastructure development means to rural America. Since its early development in 1960s, our utility has grown rapidly, regionalizing or inter-connecting with dozens of smaller communities to provide and extend water and sewer service, and become the engine for economic development in our county – including collaborating with the Town of Buffalo in securing a Toyota plant in the 1990s that is the main driver of jobs in our region. One of our partner utilities, the Town of Buffalo was able to finance the sewer expansion that was needed to serve the Toyota plant with funding from the clean water state revolving fund and our state's infrastructure and job development fund. This was a key objective of Senator Rockefeller and without the expansion of our wastewater system, we would not have been able to service the proposed Toyota manufacturing plant.

Currently, we provide drinking water to 1,714 customers, sewer to 3,568 customers and both water & sewer to another 7,713 customers – for a total of 12,995 customers. Our average water bill is \$33.84 (for 4,000 gallons) and our average sewer bill is \$47.52 (for 4,000 gallons). We also provide service to numerous small communities in the county or operate their water utilities for them – including the small town of Eleanor which was established in 1934 when President Franklin Roosevelt and first lady Eleanor Roosevelt visited the county and developed the community as a test site for families.

Our wastewater system first started in the 1970s with financing from the federal government. At that time, the lack of a central sewer system was resulting in a prohibition on any growth in the county. Our drinking water system was initiated in the 1960s with federal funding support. Through the 1980s we relied on federal water infrastructure funding, and we were able to grow various initial smaller water utilities in the county and incorporate all of them into our current county-wide water utility.

This rural water infrastructure evolution has been the reason the county has been able to attract business, build new houses and subdivisions, and absorb the impact of our region's population migration when people wanted to move away from the chemical manufacturing plants to a more favorable and livable area.

Our most recent project is a \$16.6 million project that Senator Capito has been instrumental in assisting us with the federal financing. It is fully financed by the federal government. It will allow us to provide water to 400 new homes and business, take out of service two smaller and failing sewer systems, and very importantly, have capacity to serve the location of some very large future commercial development in the area.

In the last ten years, we have borrowed over \$50 million from the federal government that was essential to our sustainability and expansion (Attachment E). We could not have secured this funding from the commercial markets and still be able to have water and sewer services remain affordable for our region.

We are constantly maintaining and replacing our existing water infrastructure with new storage, valves, pipes, motors, mechanical treatment works, generators, controls, chemical treatment works, sensors, buildings, electronics, etc. In southern West Virginia, much of our water infrastructure was initially built over 100 years ago by the coal companies and it is now failing and deteriorating. We have portions of the county with failing septic systems that need to be serviced by extending sewer lines. We still have pockets of people with no drinking water at all and they rely on hauling water to their individual home cisterns. While providing service to these underserved rural populations are the most expensive projects, when completed, they result in the most significant improvement in public health and environmental protection. I have included with my testimony a current list of water projects that are ongoing, along with the funding sources for these projects (Attachment F).

Rural communities are currently in need of economic stimulus. For example, in West Virginia and Wyoming, the recent declines in the energy sector have resulted in massive losses of state revenue, jobs, and the corresponding decrease in state infrastructure funding. A new infrastructure initiative targeted toward rural communities would be a welcome economic stimulus in rural America.

West Virginia has recently assessed the water infrastructure needs in the state. The West Virginia Infrastructure and Jobs Development Council is a governmental instrument of the State. Its primary role is to evaluate requests from project sponsors seeking to plan, acquire, design, and construct water, sewer, and economic development projects within the State and to approve funding for those projects. In 2014, the Council completed a comprehensive statewide inventory of water supply systems and sewage treatment systems and an assessment of current and future needs. Projected future need assumes a goal of serving every customer in the State. The cost of providing water service to every remaining unserved household in the State is approximately \$2.2 billion. Our state has determined that the cost for providing sewer service to all households, complying with the Chesapeake TMDL, and abating all the combined sewer overflow issues in the state is estimated to be approximately \$10.1 billion.

Every four years, EPA works with states and community water systems to estimate the drinking water state revolving fund-eligible needs of community drinking water systems by state. In 2011, EPA published their fifth national assessment of public water system infrastructure needs and it showed a total twenty-year capital improvement need of \$384.2 billion. This estimate represents infrastructure projects necessary from January 1, 2011, through December 31, 2030 for water systems to continue to provide safe drinking water to the public.

EPA's Clean Watersheds Needs Survey (CWNS) is an assessment of capital investment needed nationwide for publicly-owned wastewater collection and treatment facilities to meet the water quality goals of the Clean Water Act. These capital investment needs are reported periodically to Congress. EPA's 2012 CWNS Report was the sixteenth survey since the enactment of the CWA in 1972 which requires the Report. The total capital wastewater and stormwater treatment and collection needs for the nation are \$271 billion as of January 1, 2012. This includes capital needs for publicly-owned wastewater pipes and treatment facilities (\$197.8 billion), combined sewer overflow (CSO) correction (\$48.0 billion), stormwater management (\$19.2 billion), and recycled water treatment and distribution (\$6.1 billion).

The EPA assessments found that water funding needs in West Virginia are \$2.8 billion for water and \$3 billion for wastewater; in Wyoming, they are \$900 million for water and \$200 million for wastewater, the same amount for Delaware as Wyoming; and in Maryland, \$6.9 billion is needed for

water and \$8.5 billion for wastewater. The EPA figures for all states are attached to my testimony (Attachment G). The EPA figures are lower than our state's assessments because EPA was very strict in regards to documentation and would not allow West Virginia to count all of our needs.

Much of the funding for Putnam County water and wastewater development has come from the U.S. Department of Agriculture's (USDA) rural water grant and loan initiative. This initiative has been the historical solution for small and rural water infrastructure needs and is largely responsible for the success of delivering water and sanitation to almost every corner of rural America. This initiative is also unique among the various federal water funding initiatives because applicants have to show they can't obtain funding, the so-called "credit elsewhere" criterion. The USDA currently has a backlog of 805 applications of which 618 are for low interest loans of \$1,637,039,163 and 612 are for grants totaling \$596,784,575 for a grand total of \$2,233,823,738. This is perhaps the most discriminating assessment of need because it only measures rural and small community projects that meet USDA strict criterion for need-based high cost per household and local economic conditions. Much of the need illustrated by other assessments would not be able to meet USDA limitations on communities' ability to afford water infrastructure, meaning it would be determined that the community could afford the project without the federal subsidies. Additionally, this assessment is only measuring the communities that have proactively initiated the USDA application process after all USDA funding has expended for this fiscal year. The backlog truly represents rural and small community water infrastructure projects that can't access alternative sources of funding.

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. Similarly, states can use their federal SRF grants to leverage larger loan portfolios. According to the 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/dwsizeus.pdf>).

A simple review of projects funded by the SRFs show numerous projects funded that cost over 50 million dollars (Appendix G). 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 G).

The New York Times

A Toilet, but No Proper Plumbing: A Reality in 500,000 U.S. Homes

By **SABRINA TAVERNISE** SEPT. 26, 2016



Dorothy Rudolph in front of her home in Tyler, Ala., which does not have a septic tank. Credit: Bryan Meltz for The New York Times

TYLER, Ala. — The hard clay soil in this rural Southern county has twice cursed Dorothy Rudolph. It is good for growing cotton and cucumbers, the crops she worked as a child and hated. And it is bad for burying things — in particular, septic tanks.

So Ms. Rudolph, 64, did what many people around here do. She ran a plastic pipe from her toilet under her yard and into the woods behind her house. Paying to put in a septic tank would cost around \$6,000 — a little more than half of her family’s annual income.

“It was a whole lot of money,” she said. “It still is.”

Here in Lowndes County, part of a strip of mostly poor, majority-black counties that cuts through the rural center of Alabama, less than half of the population is on a municipal sewer line. While that is not a hardship for more affluent communities — about one in five American homes are not on city sewer lines — the legacy of rural poverty has left its imprint here: Many people have failing septic tanks and are too poor to fix them. Others, like Ms. Rudolph, have nothing at all.

That is not so uncommon. Nearly half a million households in the United States lack the basic dignity of hot and cold running water, a bathtub or shower, or a working flush toilet, according to the Census Bureau. The absence has implications for public health in the very population that is the most vulnerable.

Crumbling infrastructure has been a theme of this country’s reinvigorated public conversation about race — for instance, a botched fix for old pipes in Flint, Mich., that contaminated the city’s drinking water with lead. But in poor, rural places like Lowndes County, there has never been much infrastructure to begin with.

“We didn’t have anything — no running water, no inside bathrooms,” said John Jackson, a former mayor of White Hall, a town of about 800 in Lowndes that is more than 90 percent black and did not have running water until the early 1980s. “Those were things we were struggling for.”

There is no formal count of residents without proper plumbing in Lowndes, but Kevin White, an environmental engineering professor at the University of South Alabama, said that a survey that he did in a neighboring county years ago found that about 35 percent of homes had septic systems that were failing, with raw sewage on the ground. Another 15 percent had nothing.

Photo



Cheryl Ball in her trailer home in Tyler, Ala. Ms. Ball can't afford a septic tank, so she runs a plastic pipe that empties waste behind her property. Credit Bryan Meltz for The New York Times

"The bottom line is, I can't afford a septic system," said Cheryl Ball, a former cook who had a heart attack several years ago and receives disability payments. She lives in a grassy field on which only three of seven homes have septic tanks. Most banks now require proof that a home has proper sewage disposal before lending, but Ms. Ball paid cash for her mobile home — \$4,000.

This area, known as the Black Belt (so called more for its soil, than its demographics), is haunted by its history of white violence toward African-Americans and a deep, biting poverty. Lowndes is one of the poorest counties in the country, and its rural population, whose trailers and small houses dot the lush green landscape, often cannot afford the thousands of dollars it costs to put in a tank. Municipalities, with low tax bases, cannot afford extensive sewer lines.

Ms. Rudolph, a retired seamstress, and her husband, a carpenter, live in a tiny, white clapboard house that he built after he, his parents and his siblings fled their home on land owned by a white man who forbade the family to vote. She remembers, as a young girl in the 1950s, not having electricity. They obtained running water in the early 1990s, she said, and used an outhouse until the mid-1990s.

So their white toilet with a fuzzy green cover was a marker of progress. A plastic pipe carries its contents outside and empties into a wooded area not far from the house. There is no visible pooling of sewage, but there are other problems.

"The smell gets so bad," said Ms. Rudolph, sitting on her porch guarding her chicken coop against a marauding fox. When it rains, she wages war with her toilet. One recent downpour brought its contents gurgling up to the rim.

"I was sitting there looking at it and got me a plunger," she said. "It took me some plunging to get it clear. I was scared it was going to come back and go on the floor. Horrible."

She added, "There's nothing we can do."

The problem is prickly for the state. Parrish Pugh, an official with the Alabama Department of Public Health, agrees that money plays a part.

"That's where the rubber hits the road," he said.

But Alabama law forbids the use of “insanitary sewage collection,” and the responsibility for that rests squarely with the homeowner,” Mr. Pugh said. Resisting is not only illegal, but could have health consequences: Raw sewage can taint drinking water and cause health problems.

“My parents had a pipe that ran into the woods, and that’s good enough for me,” Mr. Pugh said, explaining a common argument. “But we didn’t know as much about disease back then. People are more educated nowadays. They are more concerned.”

The state health department begs, cajoles, and eventually cites people who have problems and do not fix them. In the early 2000s, the authorities even tried arresting people. That prompted a public outcry and the practice soon stopped, but one person spent a weekend in jail and others were left with criminal records.

The department cited about 700 people in the 12 months that ended in March, often because someone complained.

The clay soil makes the problem worse.

“Rural wastewater is usually managed with a septic tank and a drain field, which slowly infiltrates the wastewater into the ground,” Professor White said. “Well, it won’t go into the ground here. Period.”

Photo



John Jackson, former mayor of White Hall, Ala., said that until the early 1980s, “we didn’t have anything — no running water, no inside bathrooms.” Credit Bryan Meltz for The New York Times

He added: “There are some options that may be available, but it’s going to cost thousands of dollars, and most people here can’t afford it. The answer, quite frankly, is not out there yet.”

Experts and advocates have tried to find one. Grants from the state and federal governments to study the problem have come and gone, as have academics wielding surveys. There was even talk of self-composting toilets.

“It’s like we’re going in circles,” said Perman Hardy, a cook in Tyler who even did a [urinalysis](#) for a study of health effects. For years, her sewage backed up every time it rained. In December, she spent all the money she had saved for Christmas presents on a new septic tank.

Some change is happening. The town of White Hall recently received funding to connect about 50 homes to sewer lines, the first in its history. Town officials are thrilled: City sewer lines are critical to attract businesses that would bring jobs. But the pace is glacial.

Eli Seaborn, 73, a White Hall councilman, said progress would be slow, like the pace of civil rights gains, where legal discrimination is gone but lingers in other forms. Similar patience is required for sewage, he added.

“Time is going to be the only thing that solves this problem,” he said. “It took more than 50 years for it to happen. But hopefully, it won’t take more than 50 years to fix it.”

What happens when a water utility becomes an orphan



In tiny Coal Mountain, in West Virginia, residents are left to fend for themselves with a water system they can't afford to test for lead. Government agencies have all but given up on forcing tests even though residents continue drinking the water. Jasper Colt



MILA DARNELL
COAL MOUNTAIN RESIDENT

In tiny Coal Mountain, in West Virginia, residents are left to fend for themselves with a water system they can't afford to test for lead. Government agencies have all but given up on forcing tests even though residents continue drinking the water. Jasper Colt



1:25 | 2:39 What happens when a water utility becomes an orphan

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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 syphoning 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.

Pretty Prairie struggles to fix water system

By [Emily Griffin](#) |

Posted: Wed 11:42 PM, Nov 09, 2016 |

Updated: Wed 11:44 PM, Nov 09, 2016



PRETTY PRAIRIE, Kan. A small Kansas town struggles to fix its water system, and now the federal government says it's time to take action.



The Environmental Protection Agency says the nitrate levels in Pretty Prairie's water are too high, higher than the standard it sets for all states.

But most in Pretty Prairie say the financial burden to fix it could hurt the people who live in the town, the schools, and ultimately the community.

Pretty Prairie has struggled with high nitrate levels in its water for years. In 2014, those levels exceeded EPA standards again.

The action the community is looking toward is a \$2.4 million water treatment plant and a new water tower. The city is looking for grants and loans to cover some of that cost.

During a town hall meeting Wednesday night about the water project, most who weighed in were critical, but city leaders say, for now, there's no good second option.

Still, they're worried the choice they might have to make could hurt their community.



NPR For Central California

Kettleman City Water Treatment Plant Gets Green Light

By [KERRY KLEIN](#) · DEC 6, 2016

[Valley Public Radio News](#)

VALLEY PUBLIC RADIO

The rural Kings County community of Kettleman City, long plagued by unsafe drinking water, now has a clear path toward a clean water supply.

Listen

Listening...

0:59

[Listen to the report here](#)

The State Water Resources Control Board today approved the construction of a water treatment plant to serve Kettleman City. The unincorporated community's water supply contains unsafe levels of arsenic. Maricela Mares-Alatorre is a Kettleman City resident and activist, and she says residents are ready.

"Whenever you ask people what Kettleman City needs, the first thing out of their mouths is, we need better water," says Mares Alatorre.

Today's decision was the final step in approving the facility. Construction had been set to begin earlier this year but was delayed due to an additional environmental assessment. Construction is likely to begin in early 2017 and is estimated to take about 18 months.

The project will receive close to \$10 million from state and federal governments.

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Background – the Village of Marcellus (New York) maintains a wastewater treatment plant, constructed in 1959 under design standards that are no longer valid. Because the effluent from its plant enters Nine Mile Creek, which eventually enters Onondaga Lake several miles away, the Village, in March 2012, came under directives (mandates) from the NYSDEC, which are EPA-driven, to comply with new phosphorus limit regulations. The result is that the Village’s Water Pollution Control Plant (WPCP) is required to remove phosphorus down to 1.0 mg/L. The removal of phosphorus is of major concern to the Village because of the high cost to implement the mandate, including a total upgrade of the plant that will total over \$5,000,000. The DEC, in its mandate, mistakenly thought that the mere addition of chemicals, at a cost of about \$100,000, would reduce the amount of phosphorus down to the accepted level. However, our engineers have told us that major upgrades would be required because our clarifiers are not deep enough – only 8 feet. In order to get to the required depth – 12 feet – new clarifiers would have to be installed and since those at the plant were built on bedrock, decades ago, blasting would be necessary. MRB engineers have estimated the cost will total well over \$5,000,000. The Village applied for and received a \$30,000 engineering grant from NYS EFC to plan for the mandate. That engineering grant helped to determine the need for major upgrades to the plant. 2016 became the drop-dead date.

While the Village applauded the positive direction and vital impact that this new mandate would have on the environment, it also found it hard to understand why, if the requirement was so vital, that a Village of 3,000 sewer users would be forced to comply without major financial assistance. It would be virtually impossible for the Village to survive, should this mandate be enforced. The Village also questioned why the Village of Marcellus was notified of this mandate (March, 2012) **AFTER** all of the federal funding (\$111,000,000) allocated for phosphorus removal from Onondaga Lake, was awarded to and spent by METRO (Syracuse Metropolitan Treatment Plant).

MRB Engineering prepared the Facility Plan for the Village’s wastewater treatment plant and came to the conclusion that merely adding chemicals to treat the phosphorus would not be sufficient to meet the mandate, without risking violation of the SPDES permitted effluent limits. MRB maintained that a major upgrade to the plant would be necessary. The DEC, by contrast, argued that the proposed plant upgrade was a “Cadillac” project and the removal of phosphorus could be completed for substantially less money. After several years of discussion, the MRB report was given a final review and the DEC came to recognize that the phosphorus removal project at the treatment plant was significantly larger in scope than the Department anticipated when the TMDL and the Village’s SPDES permit were written. The MRB report had recommended a plant upgrade in excess of \$5.5 million, and the DEC now recognized and approved it (December 24, 2015) as valid. The DEC discussed with the Village the importance of the project, reasonable time frames, and project funding opportunities. The Village applied and was approved for an \$80,000 Water Quality Improvement Program (WQIP) grant (Round 11) for phosphorus removal. This, however, could only be used for construction purposes, not for engineering or other studies. The Village had hoped that this grant might, upon request to the WQIP funding source, be used for design purposes. This, however, was denied.

TESTIMONY OF KATETRA "K.T." NEWMAN ON BEHALF OF THE MISSISSIPPI RURAL WATER ASSOCIATION AND NATIONAL RURAL WATER ASSOCIATION AND TOWN OF COMO, CITY OF SARDIS, TOWN OF SLEDGE, CITY OF MARKS, TOWN OF TUTWILER, TOWN OF SHAW, TOWN OF CRUGER, TOWN OF TCHULA, HARLAND CREEK COMMUNITY WATER ASSOCIATION, CITY OF DURANT, TOWN OF VAIDEN, WEST MADISON UTILITY DISTRICT, MT OLIVE WATER ASSOCIATION, ST. THOMAS WATER ASSOCIATION, TOWN OF BOLTON, TOWN OF EDWARDS, TOWN OF UTICA, VICKSBURG/WARREN CENTRAL SCHOOL DISTRICT AND WEST TALLAHATCHIE UTILITY DISTRICT (MISSISSIPPI)

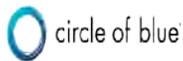
BEFORE THE SUBCOMMITTEE ON ENVIRONMENT AND THE ECONOMY COMMITTEE ON ENERGY AND COMMERCE U.S. HOUSE OF REPRESENTATIVES (FEBRUARY 27, 2015)

Subject: Safe Drinking Water Act issues related to small and rural drinking water utilities

[Excerpt]

I am honored to be accompanied here today by the mayor of one of these small communities, Mayor Everett Hill from Como, Mississippi. The Town of Como has a population of approximately 1,200 persons. Mayor Hill has been mayor for two years and his community is facing overwhelming water challenges. Como is typical of the types of challenges many of the approximately 45,000 small and rural communities across the country are facing today regarding their water infrastructure. The mayor's challenges are compounded by the fact he is a small town mayor, meaning he has a full-time job (as a truck driver), has to handle much of the city's issues on his free-time, his community has little professional staff because they simply can't afford it. In Como, the wastewater system is failing because of its age and inability to meet its current EPA permit. The cost to update Como's sewer system to be compliant is approximately 2 million dollars. The Como drinking water system needs an additional 1.0 million dollars in upgrades. The town was recently fined by the department of environmental quality for failure to comply with their wastewater discharge permit; currently the Como wastewater treatment facility is actually discharging only partially treated wastewater due to failure of the current treatment works. Within the past few months, Como finished paying the approximately 1 million dollar loan to construct their currently failing activated sludge treatment system. The loan placed considerable hardship on the residents. Como is just like thousands of other small communities in the Delta and the other states, they need a grant-rich infrastructure funding program like the USDA's rural development program, and they need access to someone they can trust for technical advice, on-site assistance, and help with managing the funding application process.

In the Town of Utica with a population of 850 persons, we are facing a nearly 1 million dollar compliance upgrade to meet our new and more stringent wastewater discharge permit. The town will likely have to accept hundreds of thousands of low-interest loan. – I can personally see the repayment of this loan placing significant hardship on the rate-payers. The Town is accepting this tremendous burden to pay for a new treatment technology called bio-domes that will be designed to enhance their current facultative lagoon cells and reduce the nutrient levels in the wastewater effluent. Small towns all across Mississippi and in fact the Country are faced with this dilemma. I believe small towns should be given more flexibility in their approaches to addressing these dilemmas. In addition, more training needs to be provided to small Town Mayors like Mayor Hill so that multi-million dollar upgrades that will most certainly tax the rate payers of these communities can be more readily understood and communicated to these residents who will ultimately be responsible for bearing the financial burden.



American Arsenic: After a Decade, Small Communities Still Struggle to Meet Federal Drinking Water Standards

July 11, 2011/in North America, Pollution, Sanitation/Health, Water Law, Water News, Water Policy & Politics /by Brett Walton

When the EPA lowered the arsenic standard for drinking water from 50 parts per billion to 10 in 2001, there were 3,000 water systems in violation. Today, nearly a thousand still are.



Circle of Blue

A decade after the U.S. Environmental Protection Agency took aggressive action to limit arsenic in American drinking water, the agency, in its latest assessment published in January, reports that nearly 1,000 water systems serving 1.1 million people are still not in compliance. Worst affected are the 914 small systems that can not find the funds to meet the arsenic standard. But there are a handful of lobby groups, along with legislation proposed in the Senate, seeking to expand federal funding and low-income assistance programs to insulate America's poorest residents from the rate shocks that would ensue if small utilities had to fully finance their own upgrades.

What Is It? Why Is It Dangerous?

Arsenic is an element that forms naturally in rocks and soil. It affects groundwater sources more often than surface water. The primary industrial use of arsenic is as a wood preservative in 'pressure-treated' lumber. Mining and smelting are other sources of manmade arsenic contamination. Epidemiological and laboratory studies have linked chronic exposure to arsenic with cancers of the skin, bladder, and lungs, as well as skin lesions. Recent studies have suggested that arsenic also alters the hormonal functions of the endocrine system.

Bottled water is regulated by the FDA, which has adopted the same standard as the EPA. Bottlers are required to test their finished water every year. They are also required to test source water every year, unless they meet exemptions under 'good manufacturing practices' regulations.

The inability of a third of the water systems identified a decade ago as a public health concern to come into compliance illustrates the competition between 21st century science, U.S. environmental regulation, and the nation's economic outlook. Monitoring equipment can identify a problem, and the government can set a standard, but the nation lacks the foresight and funding to solve the problem so that those who have the most need do not carry the heaviest burden.

Federal money for improvements to drinking water treatment wasn't available until 1997, with the establishment of the Drinking Water State Revolving Fund. Federal funding has typically been directed at sewage treatment. The Water Pollution Control Act of 1956 set federal cost share at 55 percent, providing \$US 50 million a year in construction grants for wastewater treatment. In 1972, the Clean Water Act bumped the cost share up to 75 percent, providing \$US 18 billion in grants for states to build wastewater facilities.

The cost share, however, fell to 55 percent again in 1981. Then, starting in 1987, grants began to be phased out in favor of state-administered, federally-financed subsidized loans—which, unlike the grants, had to be repaid.

Attachment B

Emblematic of the small system struggle is Andrews, an oil town in West Texas. If residents of Andrews want drinking water that meets the federal standard for arsenic, they cannot get it at home from the public utility. Like much of the Texas Panhandle, the city of 11,000 pumps from wells in the tainted Ogallala Aquifer, where groundwater is laced with naturally occurring arsenic, a known carcinogen, at a concentration of 30 parts per billion, or three times the national legal limit.

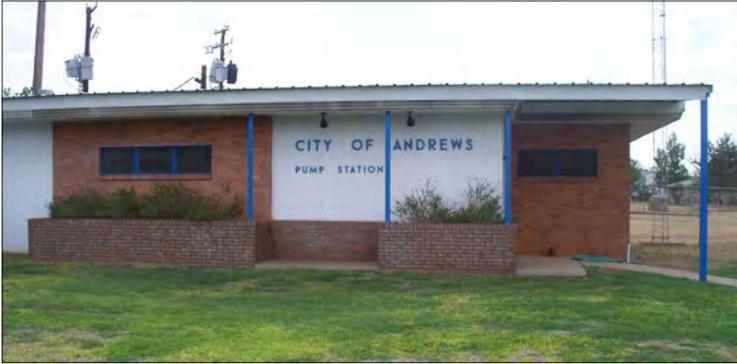


Photo courtesy of Bert Lopez, City of Andrews Water Department

To comply with regulations in a way that does not triple or quadruple residential water bills, Andrews officials are beginning a pilot project to install purification devices under the sink in every city home. Forty units are currently being tested in the trial, which runs through April 2012. If it proves successful, the state drinking water regulator will consider authorizing a full deployment. It would be one of the first “point-of-use” technologies approved in Texas as a means for complying with federal drinking water standards.

Until then, however, City Hall is the only place in the city to get water that meets arsenic standards set by the U.S. Environmental Protection Agency (EPA). Three taps jut from the north side of the building, where they can be monitored by the water department offices. One tap is for cleaning containers; the other two are fitted with the purification devices that remove arsenic and fluoride, another contaminant in the Ogallala water source that exceeds federal limits.

Bert Lopez, assistant director of water and wastewater in Andrews, told Circle of Blue that the city supplies 4,500 to 5,500 liters (1,200 to 1,500 gallons) of water per day from these taps to residents who arrive with their own containers. Some come with water bottles, others with 19-liter (five-gallon) jugs. The city, Lopez said, does not track how many people use the arsenic-free source. But, assuming the average person drinks about two liters (half a gallon) or less per day, it is possible that a third to a half of the city’s residents are opting for the public tap, instead of sipping the piped water the city has always used.

Definitions

Affordability Variance: EPA permission to use alternate, cheaper technology to meet a federal drinking water standard. No variances were granted for the arsenic rule.

Arsenic Rule: The EPA’s decision in 2001 to lower the national limit for arsenic in public drinking water from 50 parts per billion to 10.

Bilateral Compliance Agreement: Agreements used by the Texas Commission on Environmental Quality to give small communities more time and more technological options for complying with arsenic regulations.

“We can go back to well measurements from the 1980s,” said Lopez, who has worked for the city for more than 20 years, “and the arsenic levels have been the same. The standard just got lower. Arsenic has been in the water forever.”

The arsenic ruling, says Ben Grumbles, has raised philosophical questions about regulating drinking water that have yet to be satisfactorily answered. Grumbles, an EPA assistant administrator for water from 2003 to 2008, told Circle of Blue that the ideological battlefield is bounded by two concerns: How clean is clean? And how costly is costly?

A Decade Later: Systems Not In Compliance

When the EPA issued its [arsenic rule](#) in 2001 at the midnight hour of the Clinton Administration, it forced thousands of public water systems to change how they supplied water. The EPA estimated that 3,000 systems serving 11 million people

would be out of compliance. In addition, the rule affected 1,100 non-community water systems—places like churches, nursing homes, and factories.

Christie Todd Whitman, the head of the EPA at the beginning of the Bush Administration, said she would review the new arsenic standard, which was being lowered from 50 parts per billion (ppb) to 10. Following a [September 2001 report from the National Research Council](#) which concluded that the EPA had underestimated the health risk at 10 ppb, Whitman upheld the previous administration's decision in October 2001, and the rule went into effect the next year.

Public water systems were given until 2006 to meet the new limit, but they could apply for nine years worth of “compliance extensions” that would give them until 2015 to incorporate new technology into their treatment programs.

The ruling had the greatest effect in the upper Midwest, Southwest, and Northeast, regions where naturally contaminated groundwater is a main supply source. For large systems, this meant installing filtration technology in their treatment plants. Many opted for a process called ion exchange, which swaps benign molecules for arsenic ions as they pass through resin-coated filters. For some small systems, though, that solution would be like adding an airbag to a car without a chassis or wheels—they didn't have the basic treatment plant to begin with.

Our country does not want a two-tier system, where the water standards are different for those who have money and can pay and for those who don't.” — Ben Grumbles, EPA Assistant Administrator for Water 2003-2008

“This was perhaps the first time many of these systems had to build infrastructure to come into compliance with federal regulations,” said Jim Taft, executive director of the Association of State Drinking Water Administrators, a professional group for water bureaucrats. “Many are groundwater systems, which typically don't need as much treatment.”

In 2010, there were 934 documented violators, most of which were small, rural systems serving fewer than 10,000 people—many serving only a couple hundred. Thus, lacking a large customer base, the smaller systems have found it financially difficult to meet standards while keeping water affordable.

The city of Andrews, Texas, is one of those systems.

In Andrews, the water department adds chlorine as a disinfectant, but otherwise the water is distributed straight from the well field. Because of the high cost of a treatment plant—\$US11 million to build and up to \$US 5 million per year to operate and maintain, according to city water official Lopez—it has been ruled out as a compliance option.

The city is now operating under something called a bilateral compliance agreement, a deal negotiated with the Texas Commission on Environmental Quality (TCEQ), the state drinking water regulator. For the Safe Drinking Water Act, all U.S. states except for Wyoming have ‘primacy,’ which means they are in charge of monitoring and enforcement. These results are then reported to the EPA, which is the overseeing body. TCEQ appealed to the EPA for less stringent enforcement standards, and the EPA approved the approach in 2006.



Graphic © Kelly Shea/Circle of Blue

Interactive Infographic: Arsenic in drinking water is an elemental concern in the U.S. Click through the graphic for an introduction to what arsenic is and how each state is effected. Click here for the [HTML version of American Arsenic](#).

Texas is one of the few states to relax its enforcement of the arsenic rule in order to give small communities more leeway until cheaper treatment options are available. The TCEQ has signed compliance agreements for arsenic with 114 public water systems in the state. These agreements allow towns to use bottled water or community taps—like the ones at City Hall in Andrews—to provide arsenic-free water.

But these solutions are not meant to be permanent. Pending the results of its pilot project, Andrews officials have decided in favor of in-home treatment, a program that will cost \$US 3 million in capital expenditures and \$US 500,000 per year for operations, said Lopez.

Defining ‘Affordable’

The financial burdens of the arsenic rule have been controversial from the beginning. Under the 1996 amendments to the Safe Drinking Water Act, the EPA has the authority to grant affordability variances to small systems. Variances allow a utility to use cheaper treatment technology that improves water quality, but not to the point where it meets the federal standard. This determination comes with a caveat: a variance can be granted only if it does not pose an “unreasonable risk to health.”

This was perhaps the first time many of these systems had to build infrastructure to come into compliance with federal regulations.”– Jim Taft, Executive Director
Association of State Drinking Water Administrators

The criteria for affordability are the national median household income (MHI) and the national median cost of an annual water bill. The EPA has set a theoretical maximum based on the assumption that 2.5 percent of the MHI can go to paying the water bill. In other words, according to the EPA, the average American household can afford to pay about \$US 1,200 per year for water, or \$US 100 per month.

The difference between this maximum affordable water bill and the current national median cost is known as the “expenditure margin.” If a technological fix, which has been approved by the EPA for health concerns, is expected to cost less than the difference, it is deemed “affordable,” and the utility is expected to make the fix, inevitably by charging the consumer more.

But here’s where the affordability rule rubs many the wrong way: “affordable” does not mean “affordable for every system.”

This is because the designation is a national claim based on estimated costs when the ruling was made—in 1996. Individual systems may find that compliance costs in 2011 go well beyond what their customers are willing, or able, to pay. But, as far as Jim Taft of the Association of State Drinking Water Administrators is aware, the EPA has not reexamined the actual costs associated with compliance actions that have occurred over the last decade.

As it happened for the arsenic rule, the EPA determined that all technologies were affordable and issued no variances. In effect, every public water system, regardless of size, would have to meet the 10 ppb standard by 2015, at the latest.

Avoiding ‘Two Americas’ for Water Quality

The EPA’s decision was criticized on several fronts. The National Rural Water Association (NRWA), a lobby for small water systems, argued that the ruling was unfair to its constituents.

“At the community level, they do not see the need to utilize scarce [financial] resources for arsenic,” Mike Keegan, a NRWA policy analyst, told Circle of Blue in an interview last month. “It requires expensive treatment that is taking away funds from something that would bring a more tangible benefit.” Because the EPA has not yet determined what level of arsenic is an unreasonable health risk, Keegan said communities should have more flexibility in their financial decisions, or they should have more federal support.



Photo courtesy of Bert Lopez, City of Andrews Water Department

Andrews is starting a pilot project—which will run until next April—to install in-home treatment systems in 40 houses that would remove arsenic at the tap.

“It’s the money for small communities,” said Lopez, the Andrews water official. “The federal government doesn’t offer any compensation. It’s not cheap.”

A bill sponsored in the Senate by James Inhofe, an Oklahoma Republican, would do just that. Inhofe’s bill—which he has introduced every session since 2003 and which has the backing of the NRWA—would:

- Require more federal financial assistance to small communities
- Guarantee that the per-capita cost of compliance would be equal for both small systems and large systems
- Delay enforcement if sufficient funds have not been allocated

A difference regulatory approach was also recommended by the National Drinking Water Advisory Council (NDWAC), a body of water professionals that reviews drinking water regulations for the EPA. In a 2003 evaluation of the arsenic rule, the NDWAC suggested that the EPA revise its affordability criteria to consider incremental costs, which would take into account the cumulative financial effects of multiple regulatory decisions; for instance, the regulation of other pollutants.

Other recommendations from NDWAC included expanded federal funding for upgrades to small systems and a low-income assistance program, established by Congress, to insulate the poorest residents from rate shocks, while still protecting public health. The council cautioned against using variances, saying they should be a last resort because of “pragmatic and ethical concerns” and “the associated connotation of a two-tier approach to protecting public health.”

The EPA briefly considered creating dual regulations, but an agency proposal in 2006 to raise the arsenic standard for small systems to 30 ppb was never enacted. Also never enacted were any of the affordability revisions that had been suggested by the NDWAC, a topic that Grumbles, the former EPA assistant administrator, called “controversial.”

During the interview with Circle of Blue, Grumbles echoed the NDWAC’s concerns that finances should not guide regulations. “Our country does not want a two-tier system, where the water standards are different for those who have money and can pay and for those who don’t. There is a need for innovative procedures to make it cost effective for communities to get into compliance.”

The EPA does have a research program that field tests arsenic-removal technology, and some money is available from the Department of Agriculture’s rural grant program and the [Drinking Water State Revolving Fund](#), a federal loan program for drinking water infrastructure improvements—though that fund can lend only a billion or so dollars annually, and it targets all sorts of capital investments, not just arsenic removal.



Photo courtesy of Bert Lopez, City of Andrews Water Department

Public taps outside the water department offices offer residents of Andrews, a Texas oil town, water treated to the federal standard for arsenic.

What is clear is that the demand for water investment is significantly larger than the federal pot of grants and subsidized loans. The EPA's latest assessment in 2007 pegged national capital needs for water at \$US 334 billion over 20 years, or \$US 17 billion annually. Most of that will have to come from revenue and bonds, the biggest sources of utility funds.

Grumbles, now the president of the non-profit Clean Water America Alliance, is spreading the message through his organization that the public needs to reconsider the value of water. Through its outreach programs, the alliance is trying to educate people about their water supplies and the long-term costs of cheap water.

For communities struggling with the arsenic standard, though, the benefits of stewardship are cold comfort in the face of a water bill that has tripled.

And yet, arsenic, the most expensive regulated drinking water contaminant to date, may be just an opening salvo: traces of pharmaceuticals and personal care products have been detected in water supplies and are a growing concern, surely to become candidates for future regulation. Removing these, it is widely suspected, will could be even more costly than arsenic.

EPA United States Environmental Protection Agency

Learn the Issues | Science & Technology | Laws & Regulations | About EPA

GPRA Summary Report | **GPRA Violation Report** | GPRA Inventory Report

Violation Category	MCL			MON			MR			MRDL			Other			RPT			TT			Violations	Systems in Violation	Population in Violation			
	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation	Violations	Systems in Violation	Population in Violation						
Rule Code																											
Arsenic	1,225	444	383,947				629	464	1,657,386																1,854	848	2,008,615
Consumer Confidence Rule													9,602	5,792	15,185,491										9,602	5,792	15,185,491
Filter Backwash Rule							1	1	14,728																1	1	14,728
Ground Water Rule							6,663	4,519	7,266,172				336	314	4,371,613				1,715	921	4,591,154				8,714	5,533	12,028,896
Inorganic Chemicals	334	99	86,999				2,430	316	1,974,996																2,764	406	2,060,601
Lead and Copper Rule							14,015	8,729	21,987,627										748	538	640,062				14,763	8,984	22,343,418
Long Term 1 Enhanced Surface Water Treatment Rule							824	331	1,934,723				111	30	307,509				354	164	1,903,542				1,289	472	4,079,590
Long Term 2 Enhanced Surface Water Treatment Rule							112	33	2,603,446				2	2	1,511				117	49	220,239				231	84	2,825,196
Miscellaneous Nitrates	1,029	513	1,417,468				4,830	3,813	2,869,292				9	6	3,022							9	6	3,022			
Public Notice Rule													1	1	60										5,860	4,260	4,274,657
Radionuclides	966	265	398,118				1,456	330	1,393,529				33,656	10,354	11,580,684										33,656	10,354	11,580,684
Revised Total Coliform Rule	86	84	33,656	4,196	3,323	1,494,072							2,616	2,614	892,629	637	564	699,581	445	441	82,692				7,980	6,049	2,871,302
Stage 1 Disinfectants and Disinfection Byproducts Rule	16	13	265,075				3,922	2,534	6,541,403	17	5	18,525							452	294	2,227,978				4,407	2,777	8,698,948
Stage 2 Disinfectants and Disinfection Byproducts Rule	4,203	1,374	11,169,405				4,531	2,006	9,660,343																8,734	3,054	19,578,333
Surface Water Treatment Rule							1,420	479	3,845,841										902	419	2,293,630				2,322	839	6,042,491
Synthetic Organic Chemicals	20	11	50,675				13,160	569	2,525,347																13,180	578	2,575,933
Total Coliform Rule	6,061	4,684	7,024,282				17,881	11,721	9,897,666				77	77	11,936										24,019	15,457	15,961,501
Volatile Organic Chemicals	35	18	38,087				16,688	684	3,336,151																16,723	701	3,374,193
Grand Total	13,975	7,264	19,174,721	4,196	3,323	1,494,072	88,562	27,169	55,166,198	17	5	18,525	46,410	17,570	30,601,555	637	564	699,581	4,733	2,685	10,706,313	158,530	43,494	88,603,772			



National Rural Water Association

2915 South 13th Street, Duncan, Oklahoma 73533
580-252-0629 ♦ Fax 580-255-4476

www.nrwa.org

January 9, 2017

Mr. Scott Pruitt
EPA Administrator Nominee
Presidential Transition Headquarters
C/O Mr. William F. Hagerty
Director of Appointments
1800 F Street, NW, Room G117
Washington, DC 20270-0117

Dear Mr. Pruitt:

On behalf of the National Rural Water Association (NRWA), we wish to congratulate you on your nomination to be Administrator of the United States Environmental Protection Agency.

NRWA is the largest community based water organization in the country. We are headquartered in Duncan, Oklahoma and have over 31,000 small and rural community members (various forms of local governments) through our state affiliates like the Oklahoma Rural Water Association.

The great majority of communities regulated by the EPA under the Safe Drinking Water Act (SDWA) and Clean Water Act are small. Over 91% of the approximately 50,000 community water systems serve fewer than 10,000 persons and 81% serve fewer than 3,300 persons.

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 and do an excellent job with limited economies of scale and resources.

The main purposes of this introductory letter are:

- To offer our assistance in partnering with you to implement your agenda and to be a “rural resource” on drinking water safety, environmental protection, and quality wastewater service in rural and small town American;
- To urge you to recognize the benefit and meritorious purpose of rural and small communities and refocus EPA initiatives to result in improved public health protection, environmental protection, and EPA regulatory policy in (and for) rural America.

Most small community non-compliance with the Safe Drinking Water Act and Clean Water Act can be quickly remedied by on-site technical assistance and education. The current EPA regulatory structure is often misapplied to small and rural communities because every community wants to provide safe water and meet all drinking water standards. After all, local water supplies are operated and governed by people whose families drink the water

Mr. Scott Pruitt
Page 2
January 9, 2017

every day and people who are locally elected by their community. Enhancing drinking water and wastewater quality in small communities is more of a resource issue than a regulatory problem.

For example, the City of Easthampton, Massachusetts was recently in danger of violating its Clean Water Act wastewater discharge permit which would have opened the city up to civil penalties. The city did not need to know that it "must" comply, it needed to know "how to" comply in a manner that would be practicable. After a brief on-site technical assistance visit and assessment from an experienced "NRWA Circuit Rider," the Circuit Rider educated the community that its aeration tanks were not getting enough bacteria returned in their treatment process to create good effluent because the electrical controls were not operating correctly. After manually calibrating the pumps and improving the environment in the aeration basin, the treatment had improved and the suspended solids were no longer exiting the plant. The on-site technical assistance helped the city avoid possible fines of \$5,000 per day. **There are many thousands of similar examples of immediate problem-solving from on-site technical assistance.** Rural Water Circuit Riders are continually traveling throughout the states, educating local governing officials and providing on-site technical assistance to any community in need. This type of assistance is far more effective in addressing non-compliance and enhancing water quality than an enforcement-focused policy.

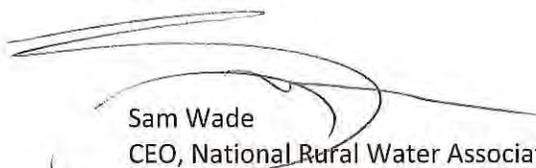
Currently, the Agency is directing many dollars on new federal programs, tools, webinars, workgroups, conferences, etc. intended to assist small and rural communities. This type of assistance is far less effective in enhancing water quality and preventing and correcting non-compliance in rural communities. We urge you to reverse this trend and focus on the types of assistance supported by the majority of small and rural communities.

Regarding our second request, we urge the EPA to recognize that small and rural communities are a solution, not a problem, to improving public health and protecting the environment. We urge the agency to recognize (including in EPA policy) that small, local governmental water utilities are all governed directly by local citizens to benefit local citizens. They only exist to improve drinking water and sanitation in rural American communities.

In closing, we look forward to collaborating with you, as the rural resource, on efforts that improve drinking water safety and environmental protection in rural and small communities. We wish you the very best, and look forward to working with you in the future.

Sincerely,

Sincerely,



Sam Wade
CEO, National Rural Water Association
Email: sam@nrwa.org
Cell: 580-917-1425

James Gammill
Executive Director, Oklahoma Rural Water Assn
Email: jgammill.orwa@gmail.com
Cell: 405-249-8404

WATER BONDS

Bond Name	Original Amount	Bond Name	Original Amount
WDA Series 1999 A Bond	6,440,000.00	USDA/RDA 2006 Bond	8,190,000.00
WDA Series 1999 B Bond	5,425,000.00	USDA Series 2010 A Bond	3,557,500.00
WDA Series 2008 Bond	1,436,000.00	USDA Series 2010 B Bond	2,931,200.00
WDA Series 2009 A Bond	627,000.00	USDA Series 2013 A Bond	3,785,000.00
WDS Series 2009 B Bond	100,000.00	USDA Series 2013 B Bond	600,000.00
		USDA Series 2013 C Bond	1,074,000.00
Total	\$14,028,000.00	Total	\$20,137,700.00

SEWER BONDS

Bond Name	Original Amount	Bond Name	Original Amount
WDA Series 2002 B Bond	1,422,000.00	USDA/FHA Series 1975 Bond	605,000.00
WDA Series 2007 Bond	2,330,000.00	USDA/FHA Serie 1979 Bond	2,200,000.00
WDA Series 2008 Bond	3,680,000.00	USDA Series 2006 A Bond	4,946,000.00
WDA Series 2009 C Bond	1,050,500.00	USDA Series 2006 B Bond	2,104,000.00
WDA Series 2013 A Bond	7,700,000.00	USDA/FHA Series 2009 A Bond	4,520,000.00
		USDA Series 2013 B Bond	6,000,000.00
		USDA Series 2013 C Bond	6,930,000.00
		USDA Series 2013 D Bond	564,800.00
		USDA Series 2013 E Bond	1,241,000.00
		USDA Series 2013 F Bond	1,500,000.00
Total	16,182,500.00		
WVIF Series 2008 Bond	509,000.00	Total	30,610,800.00
Total	16,691,500.00		

WDA Total Water & Sewer	\$30,210,500.00
does not include WVIF	
	30,719,500.00

USDA Total Water & Sewer	\$50,748,500.00
--------------------------	-----------------

Date: 013017

**PUTNAM PUBLIC SERVICE DISTRICT
WATER & SEWR PROJECTS**

January 2015

Sewer Collector Rehabilitation Project:

Line existing 30", 24" & 18" AC sewer mains; replace the existing Great Teays sewer pumping station also with new standby generator and controls.

New Customers: 0
 Engineer: Bell Engineering, Ron McMaine, P.E.
 Financing: \$2.0 Million grant, Putnam County Tax Increment Financing
 Project Status: Completed 2006

Contingency Money Purchases: Mini excavator and trailer.

Water System Improvements Project:

Three newly constructed water storage tanks and water booster stations; new raw water line from Poplar Fork reservoir to Larck reservoir; repair and painting of three existing tanks; new raw water pumps and new high service pumps for the water treatment plant; additional water line work replacing antiquated asbestos cement pipe.

New Customers: 50
 Engineer: Bell Engineering, Ron McMaine, P.E.
 Funding: USDA Rural Utility Service: \$8.190 Million loan at 4.125%, 38 yrs
 Project Status: Completed 2007

Contingency Money Purchases: Goodwin 4" water pump, materials for the construction of the 12" main from Teays Pointe to WVDOH Garage, RFID water meters and other water pipe and supplies.

Kanawha Valley / Midway Phase II Sewer Projects:

(Cannery Road, Shawnee Estates, Dockside Estates, Riverside Glen M.H.C, Hapi-Day M.H.C, Rolling Acres, Stewart Acres, River Chase MHC, Teays Point B.P., Scary Creek I.D., and Midway)

Installation of 12, 10, 8 and 6" gravity sewer pipe; 4" service lateral, 10, 8, 6, 4, 2, 1 ½" and 1 ¼" force main, manholes; duplex pump stations; grinder pump stations; 10" DIP ball & socket forcemain river crossing; 2 emergency generators for proposed pump stations; 3 emergency generators and automatic transfer switches for exiting pump stations.

New Customers: 550
 Engineer: S&S Engineers, Ashok Sanghavi, P.E.
 Funding: USDA Rural Utility Service: \$7.05 Million loan at 4.375%, 40 yrs
 Project Status: Completed 2007

Contingency Money Purchases: Sewer camera and trailer, mini excavator, self-priming diesel powered pump, replaced manhole lining, control panel,

Red House Sewer Collectors Project:

**PUTNAM PUBLIC SERVICE DISTRICT
WATER & SEWR PROJECTS**

January 2015

Construction of 6 inch and 8 inch gravity sewer lines; manholes; various size force mains; new duplex pumping stations; new simplex grinder pumping stations; portable generator; along with all appurtenances and incidental construction, as shown on the drawings or required by the specifications to provide for a complete and operable sewage collection system.

New Customers: 80
 Engineer: Dunn Engineers, Fred Hypes, P.E.
 Funding: WV Infrastructure and Jobs Development Council \$2.33 Million loan at 3%, 20 yr, and US Army Corps of Engineers Grant \$300,000.
 Project Status: Completed 2008

Contingency Money Purchases: Installation of effluent line from the WWTP to the Kanawha River

Vintroux Hollow Water & Sewer Project:

SEWER-Approximately 10,000 L.F. of 6-inch and 8-inch gravity sewer lines, 210 manholes, 12,000 L.F. of 1 1/2-inch through 10-inch force mains, 2 new duplex pumping stations, 9 new simplex grinder units, 3 new duplex grinder units, along with all appurtenances and incidental construction, as shown on the drawings or required by the specifications to provide for a complete and operable sewage collection system, and;

Water- Approximately 9,200 L.F. of 2-inch through 6-inch water lines, 8 Each of 2-inch through 6-inch gate valves, 54 meter settings, 3 fire hydrants, along with all appurtenances and incidental construction, as shown on the drawings or required by the specifications to provide for a complete and operable water distribution system.

Construction of the new Great Teays Maintenance facility

New Customers: 95
 Engineer: QK4, Mike Newton P.E. (sewer & water)
 E. L. Robinson Engineering (building)
 Funding: Water: WV Infrastructure and Jobs Development Council \$1.55 Million loan at 3% for 20 to 30 yr.
 Sewer: WV Infrastructure and Jobs Development Council \$3.45 Million loan at 3% for 20 to 30 yr.
 Project Status: Completed 2009

Note: With the completion of this project public sewer is now available from Cannery Lane / Shawnee Estates to the Coca Cola warehouse facility at the Kanawha County Line.

Contingency Money Purchases: Generators, transfer switches, 25' x 100' metal building, extended service from Putnam Aging to Coca Cola.

Hometown Waste Water Treatment Plant Renovation Project Phase I:

Clean Water Financing Proposed Priority System (FY2016)**New Jersey Department of Environmental Protection**

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

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

Attachment G

**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_sfy1516_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