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### NEWSFLASH

Granville Non-Violent Action Team stops Dept. of Homeland Security from putting huge biohazard lab in Butner—a major victory for environmental democracy! GNAT and CWFNC remain committed to stopping this misguided and dangerous project EVERYWHERE!

- See page 6 for a tidal wave of challenges to big polluting power plants.

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## YOU ARE INVITED TO OUR 2009 CLEAN WATER NEW YEAR CELEBRATION

Join us for food, fellowship and a chance to share your high expectations for safe water and environmental justice in NC!

Friday, January 9, 2009

4:00-6:30 PM

29 ½ Page Avenue, Asheville

Contact Gracia at 828-251-1291 or gracia@cwfn.org to let us know you are coming, or if you'd like to contribute a snack or dessert.



Winter 2008-2009

# Clean Water for North Carolina Clean Currents

*A newsletter of clean water and community environmental justice issues*

**Special issue: CWFNC 2008 Meeting: “Managing NC’s Water for Health and Justice”**

## Smart, Clean and Green Sustainable Water Infrastructure

*Paul Schwartz (based on Nov. 15 presentation to CWFNC’s Annual Meeting)*

Paul Schwartz is National Policy Coordinator with Clean Water Action, a national organization working to ensure clean, safe and affordable water, prevention of health-threatening pollution and creation of environmentally safe jobs and businesses.

The traditional model of water and wastewater infrastructure is based on centralized, big-pipe public water systems that rely on an industrial model of specialization and economies of scale to serve large numbers of people. However, it has become increasingly apparent that this approach is wasteful, environmentally disruptive, and not sustainable as populations increase and more land is developed over time. Climate change-related extremes of heavy storms and droughts will place even greater stresses on such large scale systems, with huge costs for restoring system function, or even for maintenance.

An increasing number of water system managers, planners, businesses, environmental and public health advocates are realizing that a new paradigm—based on working with and imitating nature—is needed to make systems more resilient, affordable and to reduce their environmental impact. They came together in 2007 to articulate the changes critical to the future of safe and affordable water systems, resulting in “the Baltimore Charter” (see sidebar). Here are some of the characteristics of nature that the paradigm must accommodate:

Nature— Recycles everything, banks on diversity, rewards cooperation, creates beauty and abundance, no waste, uses only the energy it needs, rebuilds from disturbances, can collapse from extreme stress

This new paradigm then draws from those characteristics to create patterns for achieving sustainability: onsite and neighborhood scale wastewater treatment and reuse, energy recovery, green infrastructure, (rainwater harvesting) green space, smart growth) (interconnecting nature and the built environment) open space, green cities (natural cycles of infiltration and evaporation) watershed restoration (total water cycle and habitat) climate moderation (rehydrating soils and vegetation. \_ Some of the benefits to human society and ecosystems include: saved money, enhanced performance and longevity of systems, beautification, restored streamflows and habitats, stimulus for green collar job creation, recovered energy and nutrients, and improved air quality.

Inertia and drag in the current institutional water framework, its industries, educational systems and financing patterns, could forestall a transition to more sustainable technologies and designs. Institutions will also need to mimic nature by creating more complex interdependencies at multiple scales, creating more value and resiliency.

As participation of community organizations, the private sector, and the public are increased, a richer set of alternatives for water systems will emerge. Instead of being considered separate systems, management of water, stormwater, wastewater, energy, and other resources must be fully integrated. Continuous innovation and policy reform will be needed in order to provide “packages” of effective technologies and model institutions to meet integrated needs at various scales, from single rural home to high density urban and even industrial systems.

Climate change will create even greater challenges for infrastructure design and water management. Increasing and protracted droughts will intensify the need for water efficiency, stormwater/wastewater reuse and groundwater recharge. Extended periods of wet weather will require systems that can lower base stream flows to reduce flooding, and capture/retain stormwater to prevent uncontrolled runoff.

Water in the environment is critical to energy transfer and climate moderation. Paved cities, with their associated accelerated runoff and reduced vegetation, are drying out the ground below them, thus exacerbating warming and temperature extremes, which evaporation/condensation/absorption cycles can stabilize. Well-managed water systems will restore vegetation on a site by site basis, recharge groundwater levels, and restore and stabilize streamflows.

Most hopeful are the range of options for actively moderating climate using systems designed with this new paradigm. The current large energy budget of most water systems for pumping water to residents and back to wastewater treatment can be reduced with more local water capture, storage and management. Methane, a greenhouse gas approximately 20 times more powerful than carbon dioxide, is currently released in large quantities at wastewater treatment plants, landfills and sludge distribution sites, but can provide enough energy, along with wind and solar, to take water systems “off the grid,” or to become net energy producers.

## From The Baltimore Charter For Sustainable Water Systems

“Water is at the heart of all life. In the past, we built water and wastewater infrastructure to protect ourselves from diseases, floods, and droughts. Now we see that fundamental life systems are in danger of collapsing from the disruptions and stresses caused by this infrastructure.

New and evolving water technologies and institutions that mimic and work with nature will restore our human and natural ecology across lots, neighborhoods, cities, and watersheds.”

...

“We commit to implementing more sustainable water systems by expanding uses and opening new markets for small-scale treatment processes, advancing research on micro-biological and macro-ecological scales, inventing new technologies based on nature’s lessons, creating new management and financial institutions, reforming government policies and regulations, and elevating water literacy and appreciation in the public.”

--Signed March 15, 2007 by scientists, engineers, environmentalists, government officials, manufacturers, and members of the private sector.



Clean Water for North Carolina

Clean Water for North Carolina is a private, non-profit organization based in Asheville, NC. CWFNC works to ensure that all people have a right to live, work, and play in clean and safe communities. Together, we have the power and responsibility to work for a healthy and sustainable environment. Our staff works with an active and diverse board of directors and members to increase grassroots involvement in environmental decisions. CWFNC spearheads action statewide and helps grassroots and environmental groups, individuals, and local governments develop strategies to address threats to the environment.

Our Mission

Clean Water for North Carolina promotes clean, safe water and environments and empowered, just communities for all North Carolinians through organizing, education, advocacy and technical assistance.

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Commentary

NC SAVE\$:The Path the Public Is Building to Energy Efficiency and Water Justice



Hope Taylor, Executive Director

From every big coal and nuclear power plant in NC rises a towering plume of steam. In a time of plentiful rainfall, that “gift” of steam to the sky may not seem so serious. But as population grows, and droughts lengthen under climate change predictions, the worsening ecological and drinking water supply stresses will make such a squandering of our waters disastrous.

The water that doesn’t go up in steam from power plant stacks is discharged, after absorbing waste heat from the plant, into rivers and reservoirs, and that warm water evaporates even more millions of gallons downstream. And there’s no incentive for utilities to reduce water usage—withdrawal of public waters for power production and other industrial uses is absolutely free.

Operated by Progress Energy and Duke Energy, the state’s 17 large coal and nuclear plants withdraw over 9 BILLION gallons each day from six river basins, flinging hundreds of millions of gallons of it into the atmosphere. Even if there were no greenhouse gas or toxic emissions from these plants, no raped mountains, no thousands of respiratory and cardiovascular victims, it’s obvious that this is just no way to power our state.

With our waters as a convenient heat “sink” for power plants, the engineers apparently forgot to do the calculations about how much energy these plants are just throwing away. Coal and nuclear plants are only about 1/3 efficient—they turn only 1/3 of their fuel into useable electricity for the grid. In fact, more energy is wasted at power plants themselves than in any other part of the state’s total energy budget! With 2/3 of all of the plants’ operations producing nothing but harm, we shouldn’t be able to live with ourselves as consumers, investors or policy makers if we don’t demand a rapid shift away from these water-hogs!

Climate change is moving even more quickly than the worst case scenario of the Inter-Governmental Panel on Climate Change in their 2007 report. Nothing can reduce green house gas emissions and stabilize climate more quickly and cheaply than efficiency and conservation. No approach to transitioning our energy supply will produce more jobs, produce fewer emissions, or give more economic benefits to low income folks living in older, energy-wasting homes. We can reduce our dependence on energy and water-wasting power plants, and thus the vulnerability of our power supply to drought and heat waves, when demands are greatest. Yet a recent study by the American Council for an Energy-Efficient Economy shows NC utilities spend less than 0.1% of their revenue on efficiency!

Realizing that we can’t depend on the private utilities (whose profits grow from selling more power), more than a dozen social justice, consumer and environmental groups have begun to build our own road to a more efficient state. “NC SAVE\$,” an independent statewide approach to efficiency, will focus on weatherizing low income housing, job creation and keeping savings in consumers’ pockets. The state’s Utilities Commission has ruled it doesn’t have the authority to establish such a program, so legislation will be needed. If six other states’ experiences with independent efficiency are any indication, NC could save a million tons of greenhouse gases each year, save hundreds of dollars annually for folks who need it most, replace disappearing manufacturing jobs, and help fund a more rapid transition to renewable energy.

And guess what—we could also conserve hundreds of millions of gallons of our state’s waters every day!

Visit [www.ncsavesenergy.org](http://www.ncsavesenergy.org) to find out more and join the Alliance for NC SAVE\$.

Thanks to Our Foundation Partners and Major Donors for their Generous Support!

- City of Asheville Weed and Seed Program

The Conservation Fund

Educational Foundation of America

First Congregational United Church of Christ

Greater Harvest FGBC (Rev. Charlene Morton)

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- Park Foundation

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Pigeon River Fund of the Comm. Found. of WNC

Julian Price Family Foundation (Pricey Harrison)

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Thanks to Our Recent New and Renewing Members!

Richard Fireman, Len and Esther Pardue, Bill and Stephanie Whitesides, John and Maria-Luise Rager, Herb and Connie Allred, Lisa Finaldi, Charlene Morton, Ben Gillum and Heather Rayburn, Peter and Jane Roda, Max Light, William Manning, Cathy Holt, Stephen Schewel, Jim and Beverly Carroll, Jack Spruill, Pam and Ed McNally, Charles Brummitt, Margaret Schlubach, Jennifer McGovern, Jeri Gray, Tom Duckwall, William and Ann Davis, Richard and Jane DeMott, Joseph Haun, Ruth Jones, Pat Abell, Elaine McNeill, Mitchell Jackson, Scott and Tina (Motley) Pearson, Concerned Citizens of Tillary, Claire Simpson-Jones, Rev. John Hall, Leah Karpen, Gary Phillips, Laura Gordon, Ken and Betsy Schapira, Carol Diamond and Jo Ellen Wade, Max Harless, Watershed Assoc. of the Tuckasegee River, Dr. Daniel Graham, Robin Cape and Ivo Ballentine, Sandy Adair, Jerry Price, Toby Heaton, Pam Westmoreland, Cori Maas, Bill Holman, Richard McElrath, Susan Presson, Lib Hutchby, Chris Gilbert, Ed Stein, Jim Warren, Jennifer Miller and Bob Hall, Michael McCue, Stuart and Carola Cohn, Katherine Oates, Jean and Thomas Brown, Anita Harrington, Joanna Connolly, Montie Hamby, Joan Lemire, Isaac Colman, Ed Hauser, Unitarian Universalist Congregation of the Swannanoa Valley, and Mazie Levenson.

Thanks to our Southern Energy and Environment Expo, Film fest, Permit Activists, Stream Monitoring and Annual Meeting volunteers!

Sarahbeth Larrimore, Sara Nichols, Jim Carroll, Dani Miro Quesada, Walking Hawk, Melissa Moon, Mark Crimauldo, Elise Windmiller, Drew Heedy, Lucy Ballentine, Heather Jacobs, Montie Hamby, David Schwartz, Gary Grant, Donald DeBona, Connie Allred, Nancy Holt, Shawn Swartz, Rosie Eisenberg, Gordon Rasmussen, Stephanie Grant, Jason Rummel, Jennifer Martin, Elsa Bledsoe, Rebekah, Susan Smith, Pam Swanson, Julia Kelly, Anna Weeks, Dan Gerber, Jennifer Cooper, Margaret Kosco, Ingrid Norris, Delta Adams and Samantha Korb.

And a very special thanks to Diane van Helden, legal council for Clean Water for NC and Laurel Valley Watch. Diane has contributed hundreds of hours to representing us in our challenge of a permit that would allow 300,000 gal/day of treated sewage to be dumped in a small, pristine, trout stream in Madison County – a million thanks Diane!



Join Clean Water for North Carolina (or renew your membership)!

Here’s my donation to join or renew my CWFNC membership:

- \$20

\$50

Other \$
- \$35

\$100

I would like to volunteer, contact me.

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## Big Power Plants Facing Challenges From All Over!

Clean Water for North Carolina has worked with other regional groups to draw attention to the massive consequences of big coal and nuclear plants for North Carolina's waters at a time of growing water scarcity, and to use the leverage of our state's growing "water consciousness" to challenge the need for new power plants.

In the coming months, a "Water Allocation Study" will be completed and recommendations made to the NC General Assembly for legislative changes. Unfortunately, early indications are that most policy wonks are taking the path of least resistance and expecting to "grandfather" in the huge withdrawals from our public waters even if a new permitting system is started. We'll be working to make sure that the public's real interests in its safe and accessible waters are represented, not just the power plants' right to an open-ended "cooling loop" that extends for hundreds of miles through our riverbasins!

In recent weeks, there have been several very exciting developments from various groups challenging power utilities' rights to pollute, accelerate climate change and control our waters. Here are excerpts from just a few of them!

### Coal Plants Jeopardized Over greenhouse gas emissions

November 13, 2008 • From Sierra Club

The fate of many new coal-burning power plants is now in limbo over whether to regulate greenhouse gases. Today, an Environmental Protection Agency appeals panel rejected a federal permit for a Utah plant, leaving the issue for the Obama administration to resolve.

A written statement from the panel acknowledged that this is "an issue of national scope that has implications far beyond this individual permitting process." Environmental groups and lawyers representing industry agreed that the ruling puts in question perhaps as many as 100 new coal plants.

David Bookbinder led Sierra's efforts to block the attempt by Deseret Power, a group of six electric cooperatives, to build a second coal-burning generating unit on the Uintah and Ouray Indian reservation in Utah. The Supreme Court had told the EPA it must decide on whether carbon dioxide endangers public health and welfare, and if it does it must be regulated.

### Nuclear Plant Proposals Challenged by Southeast and National Groups

From NC WARN—November 13, 2008

DURHAM, NC – An attempted revival of U.S. nuclear power is plagued by design problems that have severely delayed federal approval of the reactor most chosen by utilities hoping to build new plants. A coordinated legal action announced today by watchdog groups across the Southeast and in Washington challenges the licensing process by the U.S. Nuclear Regulatory Commission (NRC) as unlawful.

The NRC has canceled a 2007 pledge to review and recertify the standard design by 2011, and has missed several deadlines for committing to a new timetable. The groups say plant designs must be completed and genuinely certified before the agency or others can assess safety and financial risks of the multi-billion dollar projects.

"The NRC appears to be making up the process as they go," said Sara Barczak of the Southern Alliance for Clean Energy, a regional group contesting plants in Georgia and elsewhere. Southeastern legislatures (including NC, in last years Senate Bill 3!) recently shifted much of the financial risk to ratepayers, although Wall Street still insists it won't finance nuclear plants without 100% backing by federal taxpayers. The groups contend that alternatives to new plants – efficiency and renewable power – are far better for reducing greenhouse gases and for protecting against the skyrocketing power bills new nuclear plants would likely cause.

### Riverkeeper Will Argue Clean Water Act Case Before U.S. Supreme Court

November 24, 2008

Ruling will address EPA's use of cost-benefit analysis to determine power plant upgrades

(Washington, D.C.) On December 2, 2008, Entergy Corp. v. Riverkeeper, Inc. will be argued in the United States Supreme Court. The case will determine whether or not the Environmental Protection Agency (EPA) is authorized to compare costs with benefits in determining the "best technology available" (BTA) for the cooling water intake structures of existing power plants.

The Clean Water Act (CWA) requires power plants to employ the best technology available to protect fish and other aquatic life. On July 26, 2004, Riverkeeper led a national coalition of environmental groups and worked closely with a coalition of six states led by Rhode Island in a legal challenge to EPA regulations because they set weak standards and allowed power plants to seek variances.

Every day, power plants in the United States withdraw over 214 billion gallons from U.S. water bodies to cool their facilities, and kill billions of fish and aquatic creatures in the process. This is mostly due to the use of antiquated cooling systems, known as "once-through cooling," which are often employed by older power plants.

### Cliffside Must Clean Up: Court Finds Violations of Clean Air Act

From NRDC, SELC and SACE • December 2, 2008

ASHEVILLE, NC (December 2, 2008) — A federal court ruling today will force Duke Energy to meet stringent Clean Air Act requirements for control of hazardous air pollution from the 800-megawatt addition to its Cliffside coal-fired power plant. The judge sided with conservation groups challenging Duke's failure to obtain pollution limits that would adequately control toxic air pollution.

The decision will force Duke to undergo a stringent process to investigate the plant's likely pollution levels and the appropriate technology to control toxics released from the massive new coal boiler. This process must begin within 10 days and result in controls that live up to the strict requirements of the Clean Air Act within 60 days. If they do not comply, the court could halt construction on the plant.

"The court confirmed that building a coal-fired plant without proper controls for mercury and dozens of other hazardous air pollutants is wholly unacceptable," said John Suttles, Senior Attorney for the Southern Environmental Law Center (SELC). "This decision about Duke's North Carolina power plant should have people around the country breathing a big sigh of relief."

## Challenging Water Privatization: Problems and Solutions from Communities Across the Country



Jon Keesecker (based on a Nov 15 presentation)

Jon Keesecker is senior organizer with Food and Water Watch. He helps communities across the U.S. to challenge corporate control and prevent the privatization of public water resources and infrastructure.

### Privatizing Water?

The private sector has been in the water business for years, going back to 1800s France. But since a change in tax law in the 1990's, the United States has been a guinea pig for a big experiment in private water consolidation by multinational water companies riding a wave of privatization around the globe and spanning many sectors (not just water). In the meantime, cities and towns across NC are facing expensive repairs needed for both drinking water and sewer lines – infrastructure that has been largely ignored for decades as revenue from water services get diverted to the general budget. There is a growing funding gap for infrastructure upkeep/ improvement in the USA, estimated at \$22 billion/yr. and growing (as federal funding gets cut). Water service corporations are pitching themselves aggressively to city and small rural systems, and consolidation of privately owned water utilities is increasing in the US and around the world.

### Profit over people

Some of these struggling municipalities turned to private companies (such as Veolia of France, RWfE of Germany, and Suez, now US Filter, American Water and United Water respectively) to solve their water funding woes. Utilities Inc. (the second-most active private water company in NC) is owned by AIG. However, Atlanta gave United Water the boot less than 5 years later (before the contract was up), disillusioned by skyrocketing costs and the state of disrepair (i.e. \$38 million in charges to the city for work not done, poor management and delayed repairs, jobs cut from 700 to 300, etc.).

These problems are far from rare. In a pattern more characteristic of privatization in NC, Aqua NC, a subsidiary of Aqua America, is aggressively pursuing contracts in rural NC, and in some cases our own state agencies are referring communities with failing infrastructure to them. In the lower-income, and largely Latino community of Neuse River Village (near Raleigh), bills rose higher more than the lot rent (as much as \$200/mo), and within a year service was cut to half of all households. Pregnant women and young children were among those forced to use the nearby woods as a bathroom.

The NC Utilities Commission, which approves the rates of all privately owned utilities in NC, approves a 10% rate of return (profit on investment) as a "reasonable" charge for residents. When determining rates, a Commission engineer said, "Nowhere do we ask who can afford it."

Water privatization endangers our United Nations-recognized human right to safe, affordable water, and this threat is disproportionately borne by marginalized communities and people of color. The situation in Neuse River Village underscores several common community concerns, in which water privatization:

- Frequently leads to increased rates and decreased water access for low-wealth families;
- Decreases disclosure of information and responsiveness to public concerns; and

- Reduces accountability

To make matters worse, owners of privatized systems have an incentive NOT to fix leaks, as profit increases with increased water use showing on the meter, even if residents never have a chance to use it.

### Fighting Back

The good news is that communities across the country are fighting privatization and winning, stopping it at the Council level (O'Fallon, MO – Lee, MA – Emaus, PA – Knox, PA), the ballot box (voter initiatives in New Orleans, Stockton, and Akron), and "eminent domain" (Ft. Wayne, IN – Felton, CA - Cave Creek, AZ).

Although funding alone won't fix our water troubles, lack of funding is certainly a contributor to privatization. Increased federal funding of the State Revolving Funds (which have seen funding cut by 57% since 1991), establishment of a trust fund for water infrastructure, and other initiatives would be a good start. A recently introduced bill (Dodd-Hegel) to create a National Infrastructure Bank (which could include funding for waste and/or drinking water projects) was co-sponsored by President-elect Obama and includes preference for system improvements and repairs over sprawl. However, the bill also incorporates a preference for privatization and would focus mostly on urban systems (projects of \$75 million or more).

Rural communities in NC and cost-effective decentralized systems (see page 1) have received the short end of the stick when it comes to wastewater infrastructure funding for many years (see *Clean Currents* Summer 2007 issue for more info). Stay tuned to CWFNC for national and statewide action alerts related to water privatization!

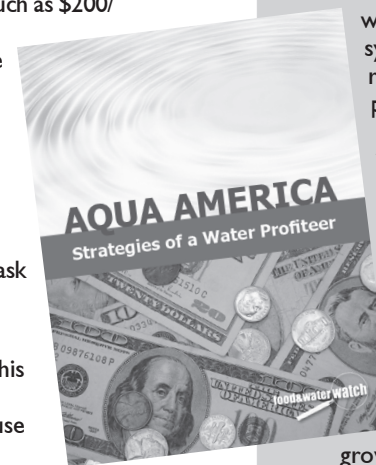
### ALERT: Aqua NC to raise water rates statewide!

Private water utility Aqua NC (a subsidiary of Aqua America, the second largest publicly traded water and wastewater corporation based in the US) is asking the NC Utilities commission to allow it to charge the same rates throughout its service territory. Under the request, rates for most Aqua NC customers would go up by 20%. But other the Aqua customers, who pay the rates of their former utilities, will go up by as much as 300%! Residents on Aqua NC systems across the state are organizing against the proposed rate hikes, and New Hanover County has already held a public hearing.

**A new report by non-profit Food and Water Watch on Aqua NC's parent company** shows that shareholders took home 13% on their investments in 2007. But, the report shows, rather than reinvesting all the money into improving water and sewer systems (as public utilities are often required to do) the company is simply lining the pockets of their shareholders, to the detriment of access to safe, affordable water. Aqua America is cutting and running on communities with the greatest needs and least profitability, and aggressively acquiring new systems, especially in places with high population growth, little competition and weak regulation (such as NC).

You can find the full report at <http://www.foodandwaterwatch.org/water/pubs/reports/aqua-america>

Aqua America's income increased 20 % in the third quarter of 2008 and pending rate-increase requests in Florida and North Carolina are expected to bring in another \$20 million in annual revenue.





## Water Efficiency in North Carolina: Overcoming the Barriers



By Teagan Ward, 2008 Duke Stanback Intern

Having grown up in drought-prone Australia, Teagan has always had a special interest in water issues. During the drought of 2007-2008, Teagan began to focus her graduate studies at Duke University's Nicholas School of the Environment on overcoming and preventing water scarcity through more efficient management.

North Carolina has become more vulnerable to drought events in recent years as a result of rapid population growth, which has led to increasing freshwater demands. In 2007-2008, we experienced the worst drought on record and, without unexpected rainfall in the spring of 2008, the state would have had a major water crisis on its hands. In order to reduce North Carolina's vulnerability to future drought events, we need to use our water resources more efficiently.

Effective water efficiency and conservation measures that should be implemented include: conservation-oriented water rates, retrofits and rebate programs, irrigation restrictions and separate metering for outdoor water use, xeriscaping and creating native gardens that require less water, conducting water audits and leak detection programs, education and marketing campaigns, and water re-use and onsite stormwater capture.

Why then, if we have all of this innovation available, are we not using our water more efficiently? It turns out that there are several barriers to water efficiency that need to be addressed before we will see the desired water savings. Some of these barriers include:

- Inadequate public funding being targeted at conservation and efficiency projects

- A fear of revenue losses by water utilities as a result of reduced water sales, downgraded municipal bond ratings
- High initial purchase costs for efficient appliances
- A serious bias toward building big supply expansion projects, such as dams and large pipelines, that attract private investors, increase public debt
- A lack of policy setting minimum standards for water efficiency and conservation
- Insufficient reporting of water use
- A history of artificially cheap water rates and the stronghold of water-intensive industries
- Conflicts of interest, engineers paid as percentage of project designed

Despite these barriers, many programs have been created throughout the state to manage water resources more efficiently. I suggest that a more holistic approach to water management be employed through the creating a "Water Conservation Utility" that would be run independently of municipal or private water suppliers. The Utility would provide water conservation and efficiency services and would ensure water and cost savings for all customer classes.

The Water Conservation Utility would have programs to address the needs of residents, businesses, industry, agriculture, and low-income residents. Specific functions of the Utility would include: education and marketing, revolving funding and financing services, retrofits and rebates, water audits by independent contractors, water re-use and rainwater catchment, policy advocacy, information sharing amongst all stakeholders, and an emphasis on community involvement.

## Who Owns Our Water?

### Film Review: *FLOW: For Love of Water*

CWFNC's Annual Meeting also featured a showing of *Flow: For Love of Water*, an award-winning 2008 documentary film directed by filmmaker Irena Salina, featuring interviews with water and community activists. The film concentrates on water privatization – a growing business which prioritizes profits over the availability and affordability of safe water for people and the environment. Salina was inspired to make the film after reading an article which focused on the daunting experience of water privatization in New Orleans.

The film shows how the privatization has jeopardized the way of life for entire populations, and how local, community-based action is the most effective way to challenge giant corporations in the US and abroad. Interviews with scientists and activists reveal the rapidly building crisis, at both the global and human scale. Major privatization players depicted in the film are Nestle, The Coca-Cola Company (groundwater pumping and bottling), Suez (purchase of city water systems), and the International Monetary Fund (IMF).

Salina builds the case against privatization of the world's dwindling fresh water supply with an unflinching focus on politics, pollution, human rights, and the emergence of a domineering world water cartel. *FLOW* also gives viewers a look at the people and institutions providing practical solutions to the water crisis and those developing new technologies, which are fast becoming blueprints for a successful global and economic turnaround.

Stay tuned for Clean Water for NC's release of our forthcoming report on water privatization in NC!



### About Water

- Of the 6 billion people on earth, 1.1 billion do not have access to safe, clean drinking water;
- The average American uses 150 gallons of water/day, but those in developing countries can't find 5;
- The water and sanitation crisis claims more lives through disease than any war claims through guns;
- According to the National Resources Defense Council, in a scientific study in which more than 1,000 bottles of 103 brands of water were tested, about one-third of the bottles contained synthetic organic chemicals, bacteria, and arsenic. ([www.nrdc.org](http://www.nrdc.org));
- Water is a \$400 billion dollar global industry; the third largest behind electricity and oil.

## Key Water Issues for the NC Legislature



Rep. Pricey Harrison (Based on a Nov 15 presentation)

Pricey is a Democratic Representative from Guilford County, Chairman of the Energy and Energy Efficiency Committee, Vice-Chair of other key environmental committees, and a long-time environmental champion

The "Short" NC Legislative session ended in July, the same day that the Drought/Water Management bill (H2499) passed. Although not as strong as the original proposal from Gov. Easley, the bill does require better reporting of water use, a streamlined process for emergency drought response, rulemaking to promote water reuse and "gray water" systems, and other provisions that represent a step forward in the state's ability to respond to droughts.

No funding was added for the Emergency Drinking Water Fund to help folks using contaminated wells, but amendments were passed to prevent use of large chunks of funding for big water line extensions that only serve a few people. There are still needs for a statewide groundwater database, ensuring well-user "right to know" about nearby contamination and testing of wells before real estate transfers.

A bill passed to raise fees to increase funding for the Underground Storage Tank program (a frequent source of groundwater contamination), and five new DENR positions for river basin water supply planning. Several bad provisions were blocked, including one that would have allowed hog operations to evade setback requirements, and another that would have restricted local governments' ability to place a moratorium on new development.

The legislative "Water Resources Allocation Study" was extended until October 2010. An interim report with recommendations on management of NC's water resources was just released, calling for state policy goals, more research, simplification of reporting, efficiency and infrastructure maintenance, permitting of withdrawals, and surprisingly, support for interbasin transfers, privatization, and more storage, troubling approaches for many in the enviro community. The report, at <http://www.water.unc.edu>, uses scenarios that have happened (withdrawals drying up streams or groundwater, a city over-committing to growth, rapid regional growth) and applies the proposed policies to them.

Rep. Harrison characterized the short session overall as a successful one for the environment. Some bills which didn't go far enough, and much more work is needed next year, but several bad initiatives were defeated.

The 2009 "long" legislative session begins on Jan. 28th and is likely to be long. With a budget shortfall that could be up to \$3 billion, it's going to be a tough year for getting bills that require appropriations passed. Rep. Harrison stressed the need for more grassroots support of environmental bills—your legislators need to hear from you!

Plan to join us for Clean Water Lobby Day in February or March and email [gracia@cwfn.org](mailto:gracia@cwfn.org) to sign up for email alerts from CWFNC today!

## Protecting North Carolina's Groundwater for Rural Communities



Boniventura Mwapule  
(Summary of a forthcoming report)

Boni is a Duke Economics student and Duke Stanback Intern he grew up in rural Tanzania and has depended on groundwater most of his life.

In recent decades, substantial depletion of our groundwater aquifers has become a pressing issue, resulting in new "capacity use area" rules to reduce withdrawals from two coastal aquifers. During the current and historical droughts, many older private wells in the western and piedmont parts of NC have dried up, requiring drilling of new wells or hookups to public supplies. Groundwater is also connected to surface water flow, so in periods of low rainfall the "base" stream flows will depend on groundwater slowly discharging to rivers, streams and lakes. During the "exceptional" 2007-08 drought, some locations in the state have recorded their lowest stream flows on record, evidence of severe stress on groundwater levels. Increasing development pressures combined with extremely complex hydrogeology make it practically impossible to predict how new (or increased) withdrawals and impervious surface on mountaintops might affect current well and spring users in the Piedmont and Western NC, in the absence of site-specific studies.

Despite these indications of a threat to a resource depended on by over 2.7 million NC residents to meet their basic needs, state agencies still have only 24 groundwater quantity monitoring wells and shockingly little knowledge of groundwater recharge rates (partly due to lack of funding). Furthermore, there is no regulatory limit to the amount of water that a private, public, or commercial well can withdraw. NC only requires permitting for new wells, and only registration of withdrawals of 100,000 gallons per day or more with a maximum penalty of \$500 for not complying with this requirement. Reporting thresholds for agriculture and interbasin transfers are even higher, while many other southeastern states have much lower reporting thresholds. These registrations are only required once every 5 years, while several other Southeastern states have permitting and annual or semi-annual reporting requirements for all registered users.

North Carolina desperately needs an overhaul of its policies to account for, protect and stabilize our groundwater resources in order to ensure safe, affordable rural water supplies, and create a more environmentally just North Carolina. New policies need to be adopted which treat ground water strictly as a public resource to be used efficiently and equitably distributed to all residents who need it.

Watch for the report on the groundwater crisis with policy recommendations from Clean Water for NC by Boni Mwapule, coming soon!