



# Chatham County, NC

## Meeting Minutes

### Board of Commissioners

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Tuesday, June 13, 2017

6:00 PM

Agriculture & Conference Center - Exhibit Hall

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#### Special Meeting

#### CALL TO ORDER

6:08

**Present:** 4 - Chairman Jim Crawford, Vice Chair Diana Hales, Commissioner Mike Dasher and Commissioner Karen Howard

**Absent:** 1 - Commissioner Walter Petty

#### BOARD PRIORITIES

##### [17-2190](#)

Presentation and update on a Natural Gas Development Impacts Study in Chatham County by Charles Yuill.

**Attachments:** [Fracking Moratorium Ordinance](#)  
[chatham ppdraft613](#)

*Planning Director Jason Sullivan introduced Dr. Charlie Yuill.*

*Dr. Yuill gave a presentation to the group. (Presentation attached)*

##### [17-2191](#)

Input from invited Advisory Boards and Committees

*Vice Chair Hales asked if the water quality issues were increasing in the Marcellus shale. Dr. Yuill stated the issues from the actual bore hole source pollution is actually being reduced but the issues of water pollution in surface water and shallow ground water is being maintained.*

*Vice Chair Hales stated they are moving away from the underground injection and North Carolina will not allow injection wells. She asked how the solids would be managed because one would assume they are hazardous. Dr. Yuill stated they are hazardous. There are landfills designed for hazardous waste.*

*Vice Chair Hales asked how are they managing to make the water less toxic. Dr. Yuill stated there is an exploding industry in water treatment. Vice Chair Hales asked if anyone has developed a strategy for treatment of water to a place where it can be used. Dr. Yuill stated yes, for things like irrigation.*

*Vice Chair Hales reported Dr. Yuill stated that no where in Chatham County could have horizontal fracking, just vertical. Dr. Yuill stated that is correct. She asked if you can pack wells any closer. Dr. Yuill stated yes and that would likely happen.*

*Vice Chair Hales asked if it would be possible for an energy company to seek a permit so they can claim the asset. Dr. Yuill stated yes, that has happened in Pennsylvania.*

*Commissioner Howard asked how you assess if the water is of reasonably good quality if you aren't allowed to know the chemicals involved. Dr. Yuill stated you would be doing the testing out of the treatment facilities.*

*Commissioner Dasher asked where they get the water used in fracking. Dr. Yuill stated from surface and ground water.*

*Vice Chair Hales stated in the state of North Carolina there is no restriction on how much water you can draw from a stream.*

*Commissioner Howard asked if there was any evidence communities have looked at the long term financial impact to the counties. Dr. Yuill stated Pennsylvania is a good example. He used to drive up central Pennsylvania and there was a two year period where you could not get a hotel room because they were booked up by the energy companies six months at a time. All the mobile home parks were packed.*

*Commissioner Dasher asked if he would say we were in a bust. Dr. Yuill stated we are in a holding pattern.*

*Chairman Crawford stated he was glad they touched on the social impacts. The number of local jobs created is small and they come on the back end. On the front end is road damage. He stated it seems the Board needs to be meeting with Lee County. He also believes the opioid problem spikes during fracking booms.*

*Chairman Crawford asked if this may also impact Moore County. Dr. Yuill stated it is quite possible. Chairman Crawford stated it could also impact Harnett County.*

*Mike Petruska with the Climate Change Committee stated members of the committee are concerned about methane. He asked if someone is trying to measure the amounts of methane. Dr. Yuill stated yes. Mr. Petruska asked if any of the jurisdictions Dr. Yuill looked at are trying to set limits or standards on the methane. Dr. Yuill stated no.*

*John Dykers with the Agriculture Advisory Board asked if there were any chemists present. Two people raised their hands. Mr. Dykers stated there are over 300 chemicals used in fracking and he asked about the recipes used in the slurries. A third of those chemicals are benign. Another third of those chemicals he wouldn't touch with a 1,000 foot pole. The other third of the chemicals he did not recognize even with his chemistry background. The recipe has to be a matter of public record.*

*Roy Girolami with the Transportation Advisory Committee doesn't think in North Carolina that we could afford to repair the roads because they aren't designed for heavy loads each day. What would they do if there was a drought and they couldn't get the water? Dr. Yuill stated they haven't been faced with that in West Virginia or Pennsylvania but they would have to close the operation down.*

*George Pauly with the Comprehensive Plan Steering Committee represents the Recreation Advisory Committee. There is interest in trails in the Deep River area, both land trails and water trails. He asked if there are regulations or constraints. It would really mess up one of the county's nicest natural areas. Dr. Yuill stated that is up to the county as long as it is compliant with whatever the state regulations are. The area that he looked at was just 1,000 acres with a buffer of only 100 feet. A*

more realistic buffer would be 1,200 feet. Mr. Pauly asked if the 1,200 foot liability range from the well heads to drinking water wells means the groundwater only moves 1,200 feet. Dr. Yuill stated that is just something he came up with for liability. The EPA would not consider any well affected outside of the 1,200 feet as a violation.

Sharon Garbutt with the Comprehensive Plan Steering Committee stated she went to all the Mining and Energy Commission meetings and she came away thinking that this is a process where a few people get rich and the rest of us pay. She asked if Dr. Yuill could find out how much money the county would actually get from fracking versus how much it is going to cost the county. She believes Chatham County is in the same pot of money as Lee County for fixing roads and therefore the county would be competing to get the roads fixed. Dr. Yuill stated that is out of his wheelhouse but that kind of study would be worth while. Counties as a rule are not making money on fracking. Ms. Garbutt stated there was a contaminant in Pittsboro water for years and they didn't know it because they didn't know to test for it. No one knows what is in the fracking fluid but even the frackers get chemicals from other companies that are trade secrets. So frackers don't even know what is in their own fracking fluid. Chatham is largely an agricultural county and the water is used for irrigation. Citizens won't know what chemicals to test for in their private wells. She asked if shallow fracking can lead to more contamination than other types. Dr. Yuill stated it can. Shallow wells are inherently problematic.

Vice Chair Hales stated there is a history of explosions on the Deep River from coal mining. They didn't know it was the methane at the time. She asked if shallow fracking meant you could anticipate more explosions. Dr. Yuill stated yes. Vice Chair Hales stated perhaps there needs to be further examination of shallow wells. Dr. Yuill agreed.

Sherri Stuewer with the Environmental Review Advisory Committee asked about the chemicals used in fracking. It is her understanding that the industry has a voluntary database. She asked how effective they are for the communities and also for first responders. Dr. Yuill stated there is a list of over 300 chemicals. The chemicals are identified by well.

Esta Cohen with the Agriculture Advisory Board asked if there is any aspect of fracking that can impact the integrity of the geology under Shearon Harris or Jordan Lake. Dr. Yuill stated he did not believe it would impact those areas.

## 17-2192

### Public Input

Martha Girolami stated she has looked at the composition of the water and sometimes they are full of VOC's. Sometimes the material is radioactive. She can never see that water going on the land. She believes there will be high pressure to put the water at the Sanford treatment plant. Dr. Yuill stated that is illegal. Ms. Girolami stated the pressure is going to be there and we are under a new administration. That is what is going to happen because we don't have a specialized treatment place and no one is going to spend money on it. The Triassic Basin is mostly plant based and tends to be less radioactive. She wants Dr. Yuill to really break down the chemicals. Which are carcinogens, petroleum products, etc. She believes we need another moratorium because of the vertical wells. Vertical wells can be as tight as every ten acres. She asked how much of the industry is recycling the water and if there is 100 gallons how much of that gets recycled. Dr. Yuill stated a lot compared to where it was five years ago.

Amanda Robertson submitted the following comments:

*Fracking. Anyone following the horrors that citizens in Pennsylvania have experienced would do everything in their power not to have this happen in their own community. Much of Pennsylvania sits on top of one of the largest natural gas fields in the world, the Marcellus Shale, and the heart of fracking in the U.S. The lives of people that live there have been impacted in ways I hope we never have to experience. Burning eyes, nose, and throat, along with headaches, nosebleeds, and rashes. Upper respiratory and skin conditions have been more common. Instances of asthmatic attacks increased by up to four times. In feed animals stillbirths and failures to breed have been reported. Water contamination. We have all seen videos of the flaming water coming from faucets. Noise from drilling, which can go on for weeks and weeks at a time, has been described as "intolerable noise not meant for humans." Road damage, overturned tanker trucks, diesel exhaust entering local homes and businesses. This is not worth any amount of money. But this is not all. The methane leaks from natural gas is something the fossil fuel industry is trying their best to keep quiet. You see, the process of extraction leaks methane, a gas that is 80-100 times more potent than CO2 at trapping Earth's heat, and has become the driving force behind the rapid heating of the planet. So while they tell us that natural gas doesn't contribute to the rise in CO2, they aren't lying, per se, but they sure are being deceptive. And it does leak. Methane leaks at extraction sites. Methane leaks along the pipelines. Methane leaks during spills. As Chatham County works to lower its emissions, we should note that just the 2015 gas leak in California's Aliso Canyon released the equivalent of the yearly emissions from more than half a million vehicles. To put it in perspective, methane emissions that exceed a range of 1.1 to 1.9 percent of total natural gas production make natural gas worse than burning coal for electricity in terms of global warming. And methane emissions rates have been observed to be as high as 12% across the supply chain. Natural gas is most definitely not a "clean" fuel nor should it be considered as a "bridge fuel." We know our regulations are held hostage by gas and oil-financed legislators. And the rollback of regulations designed to limit methane leakage from wells was one of the first acts of the Trump administration. We must do something. So, I stand before you tonight to ask you to please ask our Governor, in your authority as commissioners and on behalf of Chatham County citizens, to ban fracking and fracked natural gas from the State of North Carolina. I ask that you join businesses and leaders across the state and adopt the resolution I have put before you. Governor Cooper has it in his authority to do this, as the governors of Maryland and New York have already done. Thank you.*

*Matt Stark asked what the site cleanup consists of and what happens to the land after fracking. Dr. Yuill stated that would be current state regulations where there would be a total sealing of the well and everything would be removed.*

*Martha Girolami asked what happens to the well casing when a well is refracked. Dr. Yuill stated they could do a well resiliency test. Ms. Girolami was told that 5% of all well casings fail.*

*Alice Berry stated there are a lot of hurricanes in North Carolina and the pictures of the ponds looked like they were open ponds where wildlife can visit. What kind of pumping is there if these ponds become overwhelmed in a hurricane. Dr. Yuill stated there are state regulations in place for the design of the ponds. The ponds do suffer failures at a pretty significant rate. Ms. Berry stated earthquakes in Oklahoma have risen. If the administration decides we could go with injection wells and have three earthquakes a day it could cause problems for the Shearon Harris Nuclear Plant.*

*Terica Luxton stated she has been fighting fracking since 2012. She had flyers on who could be harmed by fracking and forced pooling.*

**ADJOURNMENT**

**A motion was made by Commissioner Howard, seconded by Vice Chair Hales, that this meeting be adjourned. The motion carried by the following vote:**

**Aye:** 4 - Chairman Crawford, Vice Chair Hales, Commissioner Dasher and Commissioner Howard

**Absent:** 1 - Commissioner Petty