

**Doug Busbee**

Good evening

On behalf of the citizens of the Edisto basin I would like to thank the members of the oversight committee for the opportunity to speak and for your service to South Carolina. I would also like to thank the representatives from the Department of Health and Environmental Control that are here today. I have come to realize that you play a crucial role in taking care of the health and well being of the people of South Carolina. Your role is vital to our state and I thank you for your service. Let me say up front I don't stand up here accusing anybody; we just want to bring awareness to a problem that we see facing all of South Carolina.

It has been 3 1/2 years since the first out of state owned corporate mega farm showed up on the banks of the South Edisto. From then until now we have questioned how such large farms were going to be supported by such a small river and its connected aquifers. We now have six of these farms pulling from the Edisto and its groundwater aquifers in Aiken and Barnwell counties.

We have learned a lot over the years since we became aware that a new Surface Water Law had gone into effect in 2011.

- Every river and stream in South Carolina had a certain amount of water that could be legally withdrawn from it. This amount of water is

known as the "Safe Yield". The more we learned the more we realized that "safe yield" was not safe at all! As a matter of fact 70 years of records on South Carolina's river systems showed that for seven months of the year there was not even enough water to supply this "safe yield amount "much less have anything left over for downstream users, basic biological and ecological functions of the river or navigation of any kind.

- We learned that there was no minimum in stream flow required of an agriculture entity of any size.
- We learned that a corporate farm could withdraw as much water as a city of 30 to 40 thousand people without any impact studies at all.
- We learned as long as the withdrawal was under the safe yield amount it had to be approved.
- And we learned that it was possible for an agricultural entity to own the entire flow of any river or stream in the state of South Carolina for as much as seven months of the year.
- We learned that this same formula is applied to industry as well and would quickly lead to over allocation of South Carolina's rivers and streams.

As we dug deeper for the source of this problem we found that the surface water law itself had addressed some of our concerns but as DHEC developed the regulations surrounding the law, major differences began to show themselves. Foremost was the difference in the definitions of Surface Water Law's "safe yield"(49-4-20.14) and required "minimum instream flows" (49-4-20.25) as compared to DHEC's regulations E.3.a.ii particularly (A).

The law called for the safe yield amount to be in excess of the minimum stream flows that vary with the seasons and respects downstream users, the biological and chemical integrity of the river, navigation and recreation.

Under DEHEC's regulations safe yield has been simplified to 80% of the mean annual daily flow with no regard for anything else. Make no difference if there is any water there or not!

So, based on the premise that The South Carolina Surface Water Withdrawal, Permitting Use and Reporting Act is supposed to protect our rivers and streams from over allocation, guarantee the rights of downstream users, and protect the basic biological and ecological functions of our rivers and streams. We would like to request that in your overview of The Department of Health and Environmental Control that you review the SC Surface Water Law's intentions, and then use that

framework as a lens to assess the Department's implementation through regulations, particularly the difference in definitions of "safe yield" and its implementation.

This problem will ultimately be a state wide problem but because we have 60% of the state's total agricultural withdrawals on the Edisto; we have felt the effects of this law and its dangerous regulations first. If you don't think this serious I want to leave you with this fact; In August of 2016 last August, had the city of Charleston needed its permitted amount of withdrawal from the Big Edisto there was not enough flow in the river to supply it and yet our very unsafe "safe yield" formula said we had millions of gallons per month more water available at that same point!

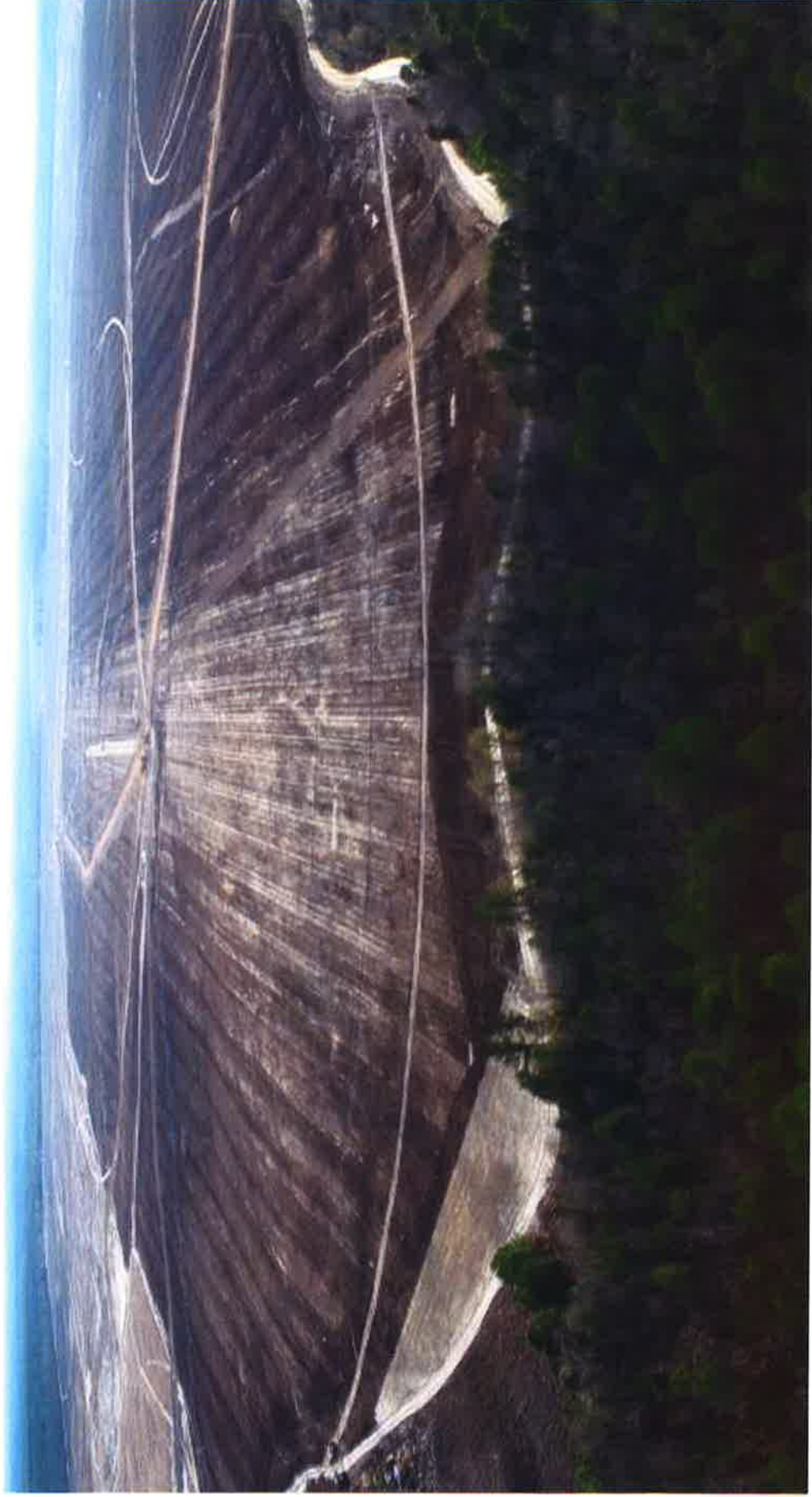
And quite frankly we are getting tired of being told by our elected officials to "wait on science" or "we're doing a study". My question is where was the science when the law and regulations were being formed? I am here to tell you it does not take a rocket scientist to look at the graphs prepared by DNR and figure out we have a problem! It is just math!

We are including a list of additional questions that may help in your discovery and we would like answers to them as well. Also please see attached pictures and DNR graphs. Thank you for your time and consideration.

Sincerely

Doug Busbee

On behalf of citizens of the Edisto Basin



1 - The Walther Farms "Augusta Plantation" site, estimated 3000 acres, seen from the air on December 11, 2013



2000  
Jan 1997  
Water  
Daily

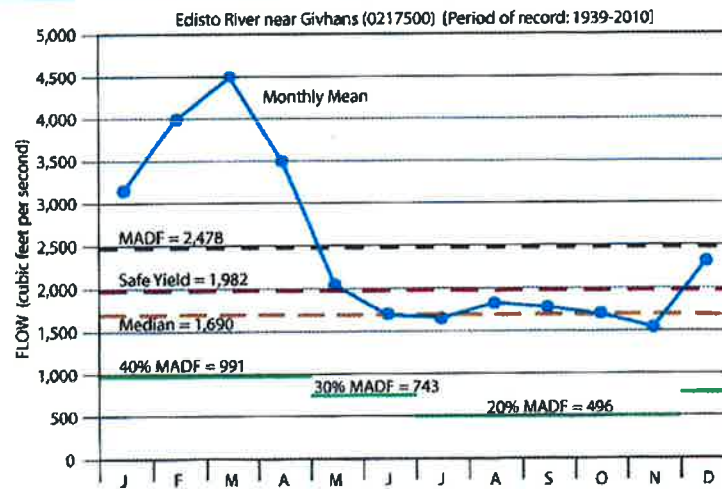
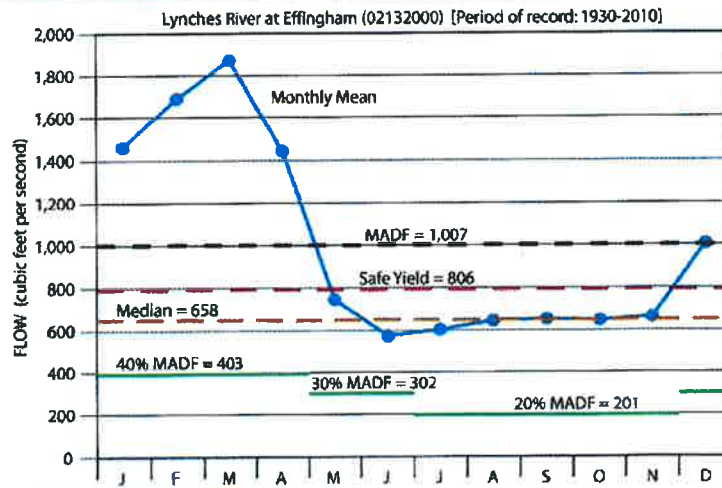
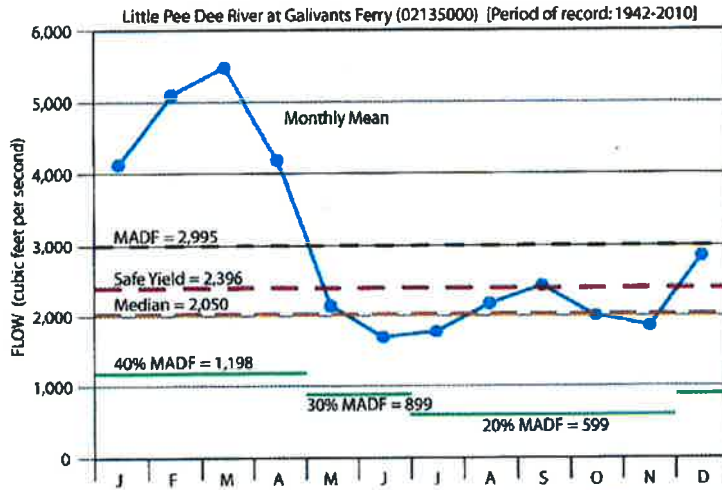
4 - According to DHEC, Goodland Creek, at a registered withdrawal point, has a "safe yield" of 485  
MGM - Can you imagine a farm the size of the Walther Brothers "Augusta Plantation" site located  
on this creek?



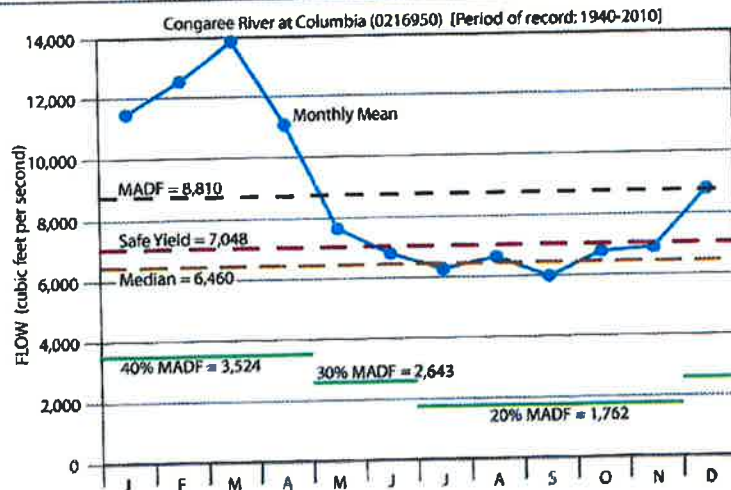
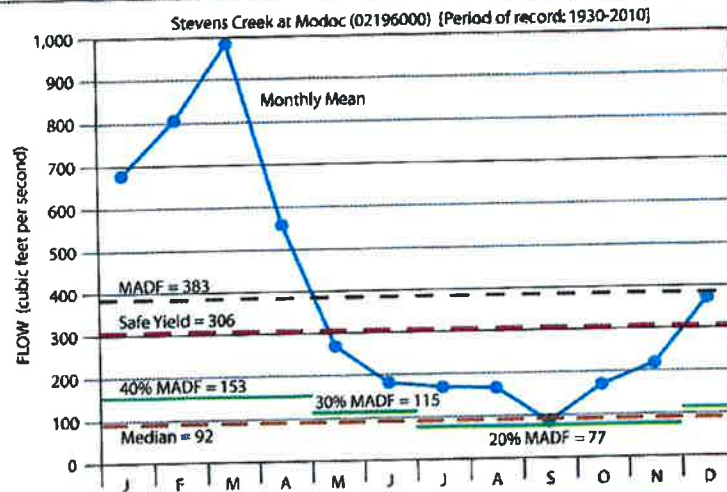
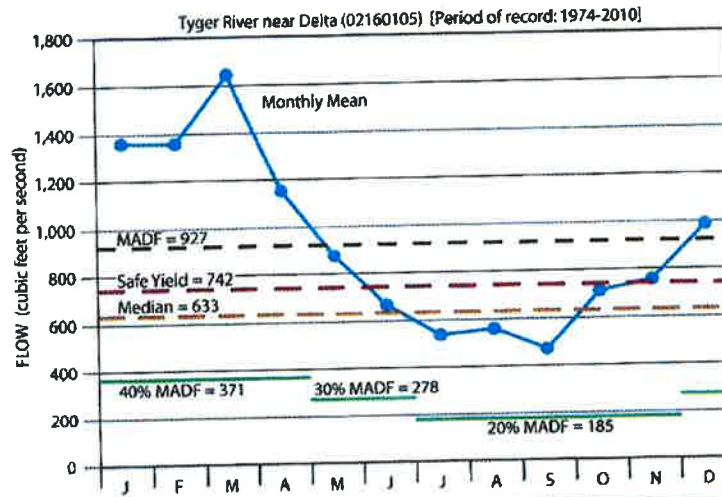
1. Who in South Carolina state government coined the phrase "Safe Yield"?
2. According to the definition in the SC Surface Water Law, what is supposed to be protected or safe under the "Safe Yield Formula"? 49-4-20 in particular definitions 14 and 25
3. Why does DHEC's regulations (R.61-119) define "Safe Yield" similarly to the Law in B.29, but differently in E.3.a.ii (A) it is calculated as 'the difference between the mean annual daily flow and 20% of mean annual daily flow at the withdrawal point or simply 80% of the mean annual daily flow?
4. Did any hydrologist/experts within DHEC review the "safe yield "as it is defined in regulations E.3.a.ii (A)? What are their names and credentials?
5. Do you know of any experts outside of DHEC that reviewed the law and the regulations at the time of their promulgation? Who were they? What are their credentials? What were their opinions of safe yield as defined in the regulations?
6. Why did DHEC do away with the 20-30-40 plan for minimum in stream flows?
7. Why is DHEC not considering the needs of downstream users and minimum in stream flows when issuing agricultural registrations and permits?
8. Is there a documented procedure explaining how minimum in-stream flows would be detected?
9. Has any science been done in DHEC to determine the safety of "safe yield"? If so who? What are their rationales and assumptions? What were the uncertainties and risk involved in the science? Can we get a copy?
10. What data was used in determining the safe yield formula described in regulation E.3.a.ii (A) which has become the basis for issuing surface water registrations and permits? Can we get a copy of the data?
11. Under the current safe yield formula that is being used to issue surface water registrations and permits, Is it legal for an agricultural entity to completely take the entire flow of the river if it is within their registered amount?
12. Under DHEC's regulations can one agricultural entity own the entire safe yield of a river or stream?
13. Is DHEC aware that the safe yield amounts calculated under their regulations are greater than the actual flows of the major river systems in SC for seven months of the year based on 70 years of data of average monthly flow from DNR and USGS?

14. What effects does No Water have on fish and biological functions of a river or stream? What effects does no water have on downstream users?

Hydrographs of selected South Carolina rivers showing mean annual daily flow (MADF), monthly mean flow, median flow, the 20-30-40% MADF flow, and the "safe yield" as defined in the proposed DHEC regulations.



Hydrographs of selected South Carolina rivers showing mean annual daily flow (MADF), monthly mean flow, median flow, the 20-30-40% MADF flow, and the "safe yield" as defined in the proposed DHEC regulations.



**Babs Warner**

Legislative Oversight Committee  
Department of Health and Environmental Control  
January 24, 2017

Mr. Chairman, Members of the Committee,

I am Babs Warner. I am Vice President of Legal Services and Corporate Secretary for Santee Cooper, South Carolina's state owned public power and water utility. In this role I work extensively with DHEC on various regulatory, permitting and compliance matters. I also serve as chair of the South Carolina Chamber Environmental and Technical Committee. Our members represent many businesses ranging from large utilities and manufacturers to small businesses and consultants, all of whom interact with DHEC frequently.

DHEC is a regulatory agency and Santee Cooper and the industries represented by the South Carolina Chamber of Commerce are regulated entities. Therefore, I am not here to attest that DHEC ascribes to the theory that the customer is always right. They do not, and we respect that. What they do ascribe to is a goal of good customer service and full participation in the process. Regulated entities are looking for an efficient process, fair application of regulations and timely decision making. DHEC strives to meet these expectations, and under recent leadership has engaged in strategic planning and process improvement to better meet these expectations. DHEC is also working to improve its website and electronic communications, and these steps will be valuable tools to assist in the services it provides.

An example of their engagement in the public process is their leadership and participation in the Energy Coalition. During the time prior to the Clean Power Plan being stayed by the Supreme Court, DHEC's Bureau of Air Quality took the lead in bringing together stakeholders representing environmental groups, power companies, electric cooperatives, citizen groups, regulators and the legislature to have meaningful input into the rulemaking process and its effect on South Carolina.

DHEC's Bureau Chiefs have always been willing to speak and provide information to the South Carolina Chamber Environmental and Technical Committee. Each year each of the Bureau Chiefs makes a presentation at our meeting and takes questions. If there are issues, they are open to further input and discussion. In addition our subcommittee chairs meet regularly with DHEC staff to receive information and provide input.

Finally, let me provide you of an example of where DHEC staff has performed very well in tough circumstances. As we all know, in October of 2016 Hurricane Matthew hit South Carolina. Santee Cooper, like all the other utilities in the state, had a number of challenges to face, and these were not only occurring 9 to 5, but around the clock. DHEC was fully staffed and responsive to us at all times. They were in constant communication with us, providing updates and sharing information. It was a good feeling to know that they were as dedicated to dealing with the adversity we were facing as we were.

Thank you for the opportunity to share this information with the Committee.

**Linda Stebbins**



**Cathy Greer**

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**From:** Linda Stebbins <stebbinscarter@gmail.com>  
**Sent:** Tuesday, January 24, 2017 7:34 AM  
**To:** House Committee on Legislative Oversight  
**Subject:** Water levels and pollution to water supply from nitrates in run-off in Windsor, SC

To Whom It May Concern,

Having been a new resident of Windsor, SC for 2 years, it concerns me and my family greatly as to the on going installation of mega farms in our immediate area and the impact they are having on our environment and water supply. We have chosen this area to retire due to the open space and pastoral setting. It has been brought to my attention that there are no water usage regulations for the "mega farms" to follow, and that is perhaps one of the main reasons they have come to this state. These farms are huge and are governed by big companies with considerable "clout". To prevent our town of Windsor from becoming a ghost town due to lack of water or non potable water, we urge the state officials to seriously take a hard look at the rapid progression of these "mega farms" and take the necessary action to prevent our town from becoming non existent in the near future.

Linda Stebbins  
Windsor, SC

**Michael N. Couick**



January 24, 2017

The Honorable Phyllis J. Henderson  
South Carolina House of Representatives  
Legislative Oversight Committee  
Chairman, Healthcare and Regulatory Subcommittee  
522B Blatt Building  
Columbia, South Carolina 29201

Dear Madam Chairman,

On behalf of South Carolina's electric cooperatives, I would like to commend the South Carolina Department of Health and Environmental Control's Office of Environmental Quality Control for their commitment to stakeholder consensus-building and meaningful public engagement in. I am particularly thankful for the role played by DHEC's Director of Environmental Affairs, Myra Reece, in helping us fight the fight of having Washington D.C. regulators appreciate investments made by South Carolinians in clean energy resources and related policy decisions that had been made in South Carolina. DHEC's Office of Environmental Quality Control helped lead this high-stakes public policy struggle over the course of several years by pulling together a diverse group of stakeholders in an effort to build consensus around complex and politically polarizing issues that stood to affect the economic wellbeing of communities across the State had they not been successfully resolved. That group of stakeholders includes key representatives from the state's electric utilities, conservation groups, clean energy business alliances, research universities, environmental justice communities, and industrial and manufacturing groups.

DHEC's Office of Environmental Quality Control's dedication and leadership positioned our state to achieve compliance with truly momentous federal regulatory efforts in a manner that sought to address the concerns of all stakeholders and that could ultimately be beneficial to all South Carolinians. Perhaps more importantly, the Office of Environmental Quality Control's tireless efforts in building consensus around crucial energy and environmental topics has helped to change the landscape of energy and environmental policymaking in South Carolina, where collaboration and open dialogue are now hallmarks of public policymaking.

South Carolina's electric cooperatives offered their collective appreciation for that tremendous work by honoring DHEC's Bureau of Air Quality and its former Chief, Myra Reece, in December 2015 with the nationally prestigious Lineman's Award, which embodies loyalty, hard work, dedication and commitment to community, capturing the cooperative philosophy.

I appreciate the opportunity to comment on the public service that DHEC's Director of Environmental Affairs, Myra Reece, and many others within DHEC's Office of Environmental Quality Control have performed on behalf of all South Carolinians over the last several years. I look forward to continuing to work with DHEC's Office of Environmental Quality Control and am confident that their commitment to pursuing excellence, inspiring innovation, promoting teamwork, and embracing service will persist under the leadership of Mrs. Reece.

Sincerely,

Michael N. Couick  
President and Chief Executive Officer  
The Electric Cooperatives of South Carolina, Inc.

**Peter DeLorme**

# Windsor, SC Area Water Usage Analysis for 2014 and 2015

## Aiken and Barnwell Counties

### Aiken City vs Large Farm Usage

#### Water Usage - Aiken/Windsor Area (Millions of gallons per year)

	2014	2015	Increase	% Increase	
<b>Aiken County Ground Water Registered Users</b>					
Total County	6,392	6,642	250	3.9%	2014 Population
Aiken City	2,390	2,450	60	2.5%	<b>30,258</b>
Walther - Ground		207	207		Gallons per person
					<b>78,987</b>
<b>Barnwell Ground Water Usage, Millions of gallons per year</b>					
Walther - Ground		414			

#### **Walther Farm Water Usage, Millions of gallons per year (Surface and Ground, Aiken and Barnwell)**

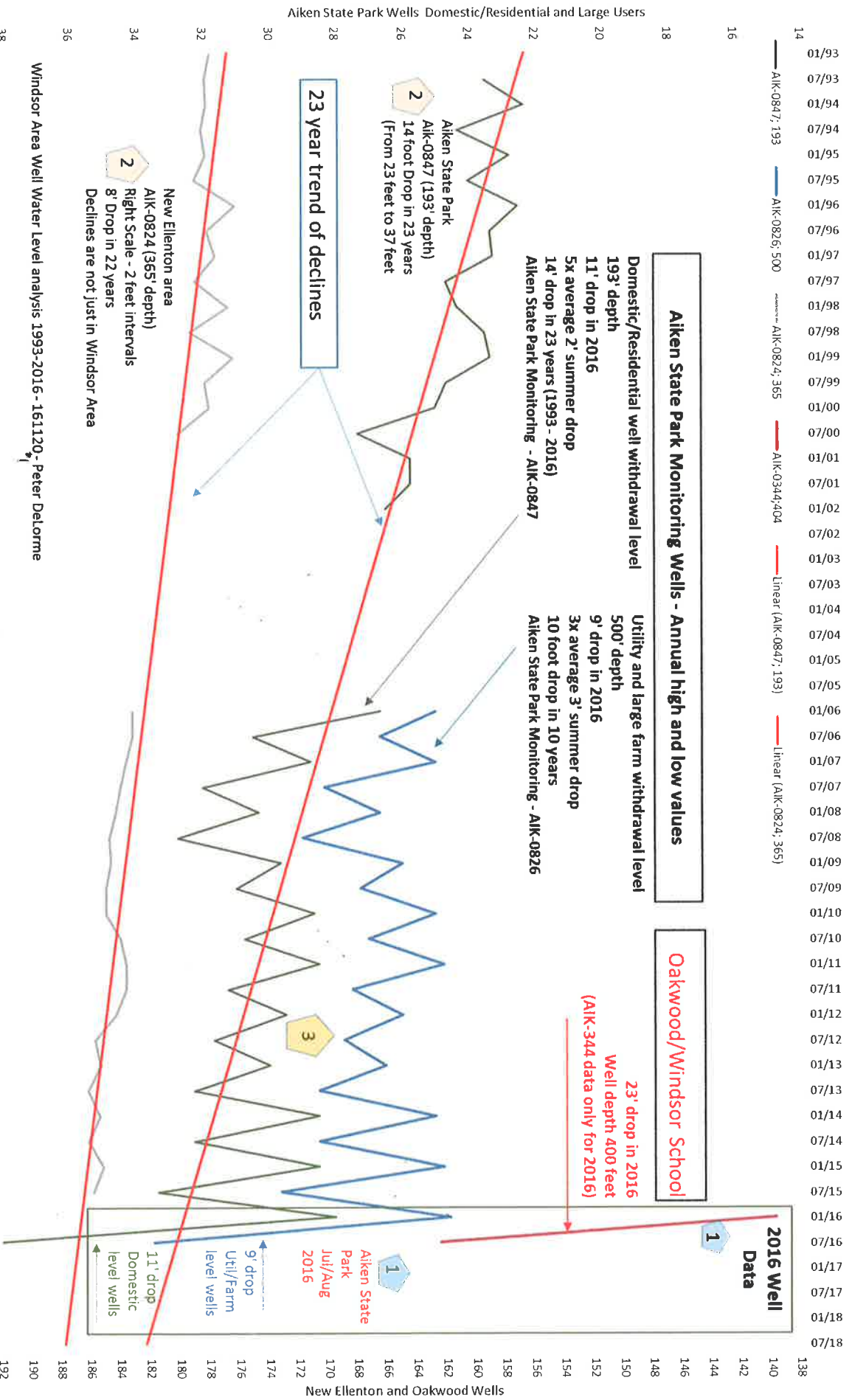
Walther Ground Total	621				
Walther Surface Total	1,040				Person Equivalents
Walther - Both Farms Water Usage	1,661				<b>21,032</b>
Walther as a % of Aiken City	68%				

Prepared by Peter Delorme 1/24/17  
 Source FOIA requests for SC water usage

# Windsor Area Monitoring Wells - Water Level Trends

Annual High (Winter) and Low (Summer) data points  
 Analysis/Comparison of DNR Hydrograph Data by Peter Delorme

- Key Points**
1. Dramatic summer declines in 2016 (up to 23 feet)
  2. 3 - 5 times more than historical yearly averages
  3. 23 year trend of Declines in Aiken & New Ellenton
  - 3a. Historical summer drops average only 2 - 3 feet
  - 3b. Aiken wells mirror each other (interconnectedness?)



**Ray Mansur**

## **Notes for Legislative Oversight Committee Meeting 1/24/17**

### **Retired to Windsor from California in 2006**

**Attracted to reasonable land prices, pleasant climate, reasonable taxes, a growing carriage driving community in Windsor.**

**During 2013 through 2015 thousands of acres in the Windsor area were purchased by out of state commercial farming families. What had been pine forest was cleared and put into cultivation of potatoes, corn and other crops. The new farmers are state of the art and minimize the variabilities of farming by controlling as many factors as possible. To manage Mother Nature's whims, pivot irrigation systems are installed using water from surface and aquifer when needed.**

**Once I began to understand the magnitude of the new farms impact, I became concerned whether or not our water resources were sufficient to meet this new demand and started to educate myself on South Carolina's water laws and history.**

**As a result of drought and serious water shortages during 1998 - 2002, SC DNR updated The 1998 State Water Plan and generated the 2004 State Water Plan. In that plan it was recommended that the entire coastal plain be declared a**



**water capacity use area. This did not happen, and out of state farmers were solicited to move to South Carolina. The farmers found large tracts of reasonably priced land in and around Windsor, purchased, and started producing.**

**My purpose today is to ask that the Legislature realize that the new farms are withdrawing prodigious quantities of water (in 2015, Walther Farms withdrew 621 million gallons from the aquifer and 1.04 billion gallons from surface sources, mostly during the months of May - July). The City of Aiken withdrew 2.45 billion gallons in the same year. We do not have 2016 withdrawal data yet, but expect the farms to consume a quantity close to or exceeding that of the entire city of Aiken by the end of 2017. This alarming escalation of water withdrawals is why a group of Windsor area homeowners feel that Capacity Use is necessary now, not several years from now.**

**Thank You**

**Ray Mansur, Wren Rd. Windsor, SC**

**Carolyn Barrett**

increased or decreased changes in sound, but what does that mean objectively?

- $\pm 1$  dBA change. Most people would say this is an undetectable variation in two sound levels.
- $\pm 3$  dBA change. Most people would say this is a noticeable variation in two sound levels.
- $\pm 6$  dBA change. Most people would say this is an obvious variation in two sound levels.
- $\pm 10$  dBA change. Most people would say this is twice as loud (or half as loud) as the original sound level. This is considered a significant change.

**Table 2.** Approximate sound levels of common activities when a sound meter is 1 m from the source

dBA	Activity
0	Threshold of hearing for humans
15	Normal threshold of hearing for humans
20	Calm human breathing; very soft whisper
30	Calm room, library, empty church, secluded woods
40	Rural ambient background sound: 7 pm to 7 am
45	Rural ambient background sound: 7 am to 7 pm
50	Inside an average home: refrigerator hum
55	Low volume of TV or radio
60	Normal conversation
65	Sleep disturbance
70	Busy business office
80	Curb side of a busy road
90	Barn full of finisher pigs at feeding, gas lawnmower
100	Chainsaw, circular saw, ATV, irrigation pump
110	Grain dryer fan and burner under full load
120	Threshold of discomfort, rock and roll concert
130	Threshold of pain, jet engine at 25 m away

### Persistence

Sound persistence is how easily a noise decreases with distance away from a noise source until it is not detectable. This takes long distances for some types of sounds. It is important to understand that some noises can impact a neighbour further away than one might reasonably expect. However, it is important to understand that a detectable sound is not automatically a nuisance sound.

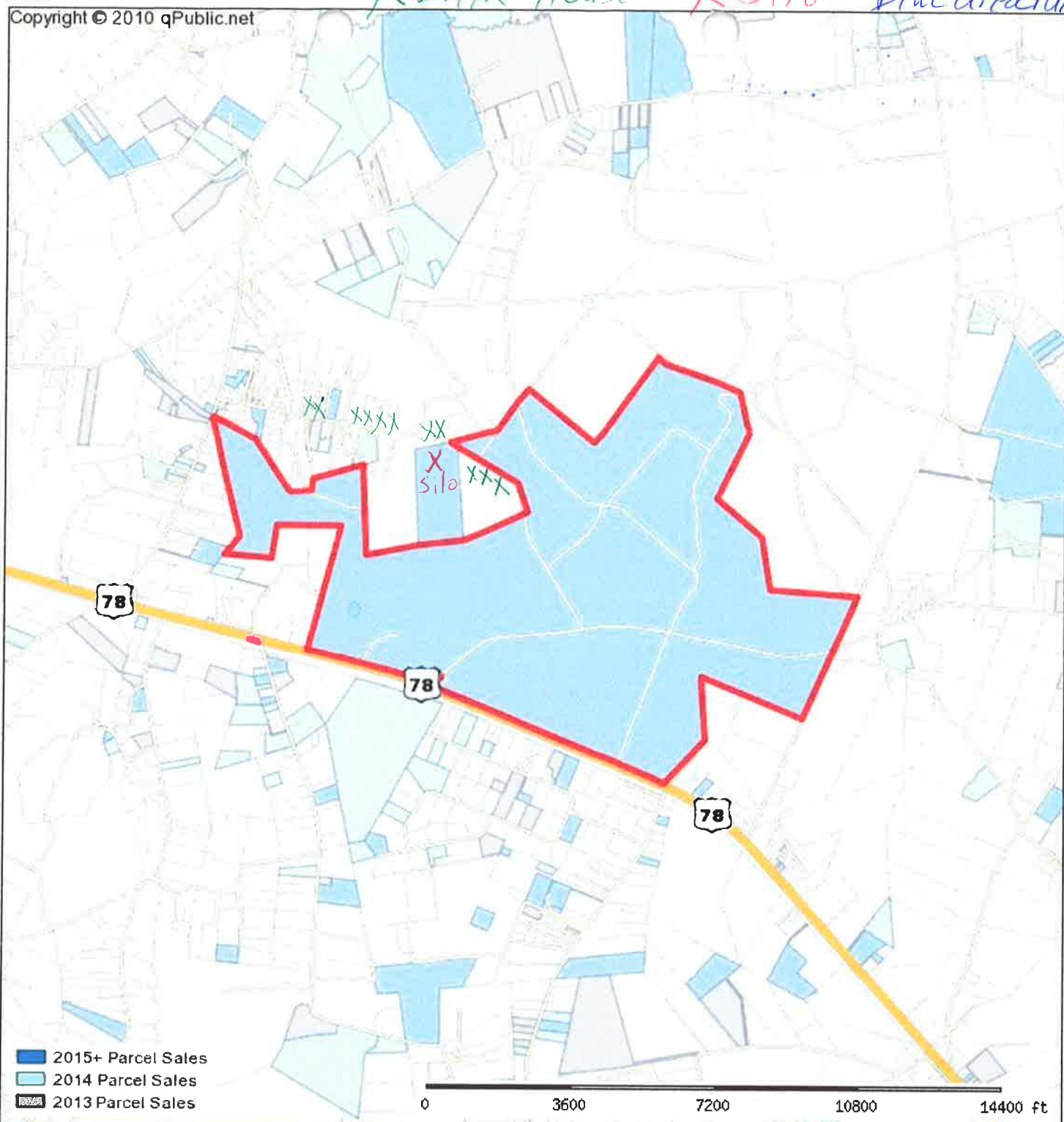
### Character

Sound character is a subjective descriptor, such as a sound's tonality (whine of a circular saw or hum of an electrical transformer), beating (wind machine blades beating against a strong wind or multiple fans running at different speeds), impulse (occurring for less than one-tenth of second, such as a door slamming or a shooting noise) or intermittence (not continuous, but remaining on longer than 1 second, such as an exhaust fan or



~~460~~ ~~Beck Rd~~ 128 Pearl Bennett Rd, Windsor  
Cleared up to property  
line - NO BUFFER  
SC  
Jan 2017

X Dropp Houses X Silo Blue area Farm



- 2015+ Parcel Sales
- 2014 Parcel Sales
- 2013 Parcel Sales

0 3600 7200 10800 14400 ft

**Aiken County Assessor**

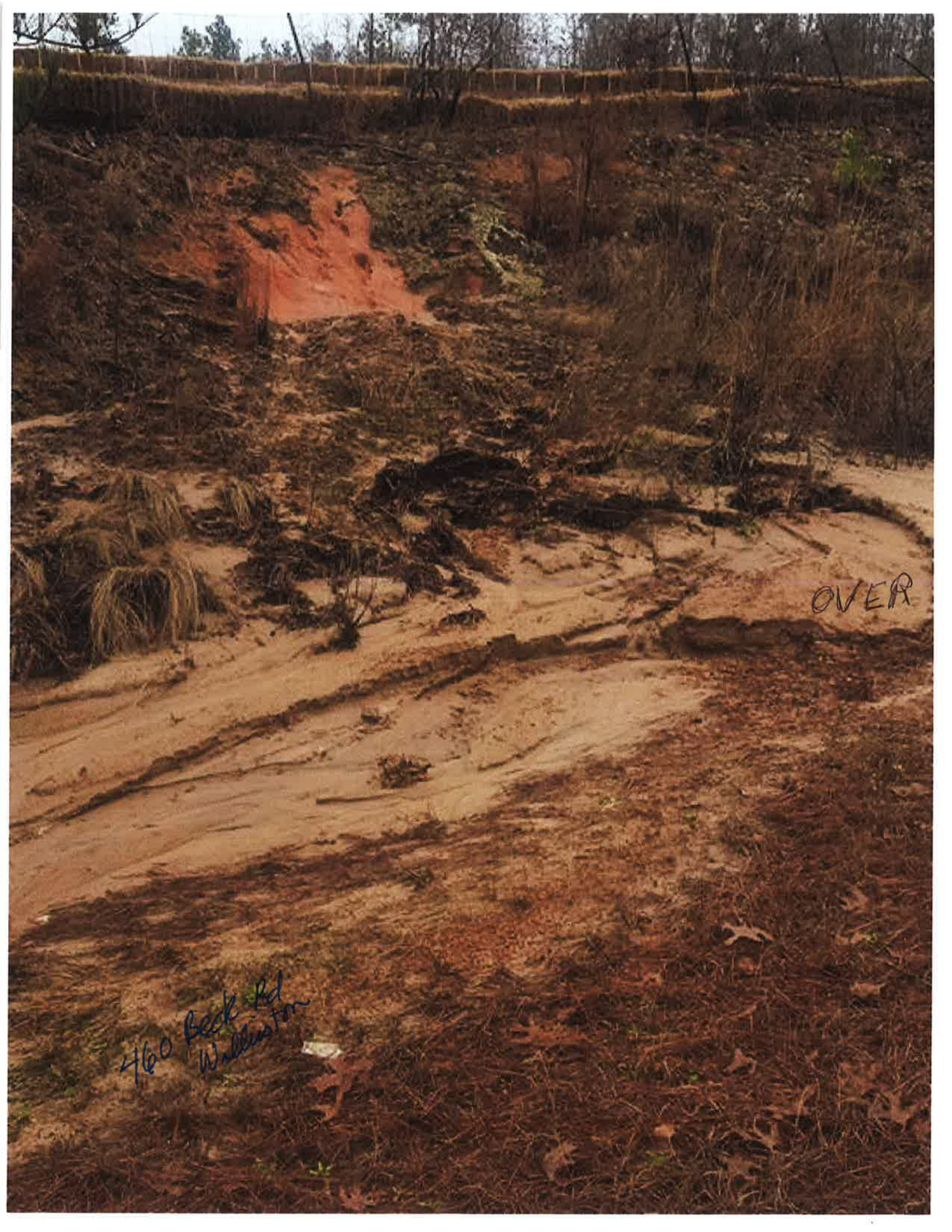
Parcel: 207-00-01-003 Acres: 1950.32

<b>Name:</b>	CAMERON TRUSTEE BRUCE B	<b>Land Value:</b>	244614
<b>Site:</b>		<b>Improvement Value:</b>	0
<b>Sale:</b>	\$5753250 on 2015-02-17 Reason= Qual=U	<b>Accessory Value:</b>	2707
<b>Mail:</b>	PO BOX 3649 WILMINGTON, NC 28406	<b>Total Value:</b>	247321



The Aiken County Assessor's Office makes every effort to produce the most accurate information possible. No warranties expressed or implied are provided for the data herein, its use or interpretation. All assessment information is subject to change before the next certified tax roll.  
Date printed: 01/18/16 : 18:45:32

**Nancy Tomlinson**



OVER

460 Beck Rd  
Walliston



Red sign on the gate, illegible text.

OVER →

460 Beck Rd  
Williston  
S.C



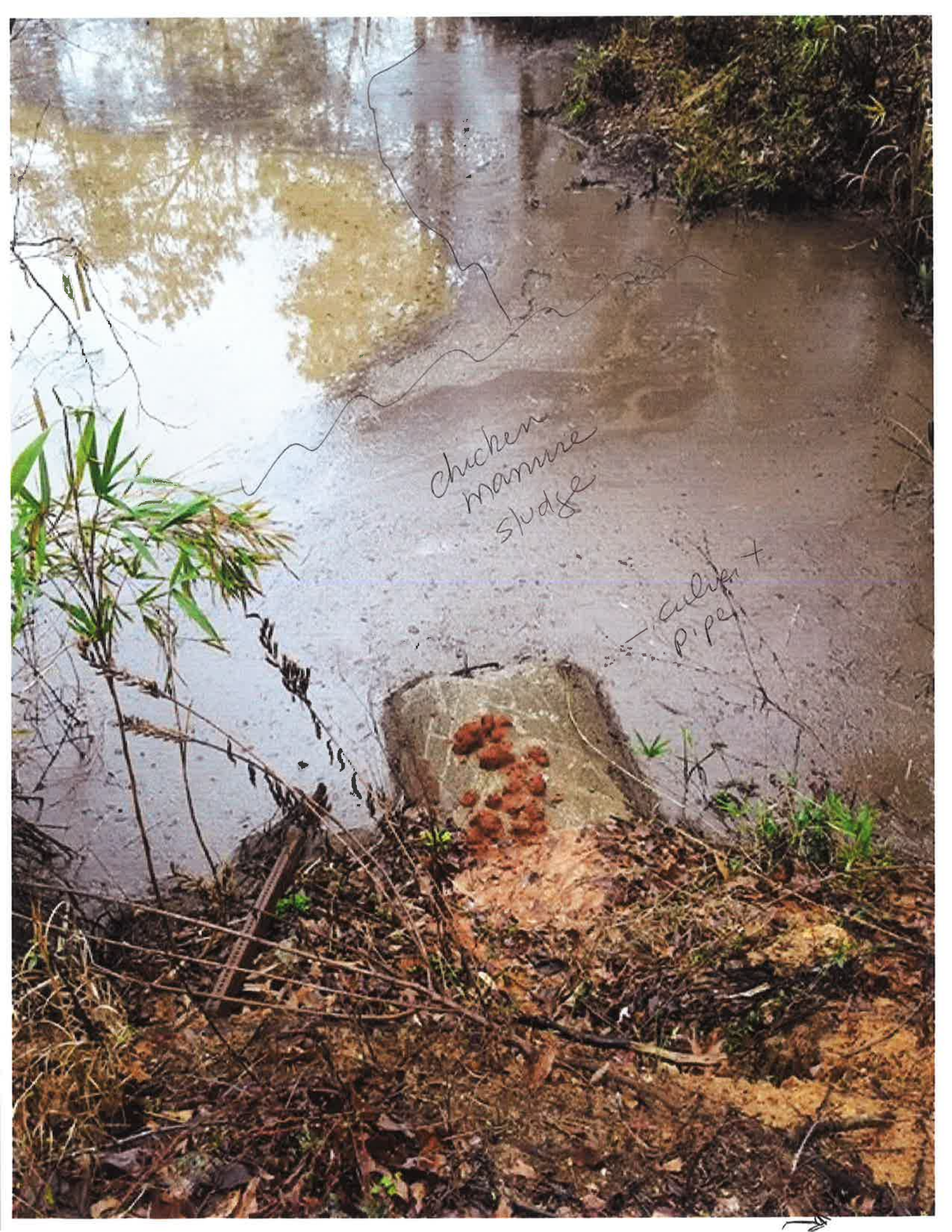
OVER  
→

460. Beck Rd  
Winston, SC.

OVER

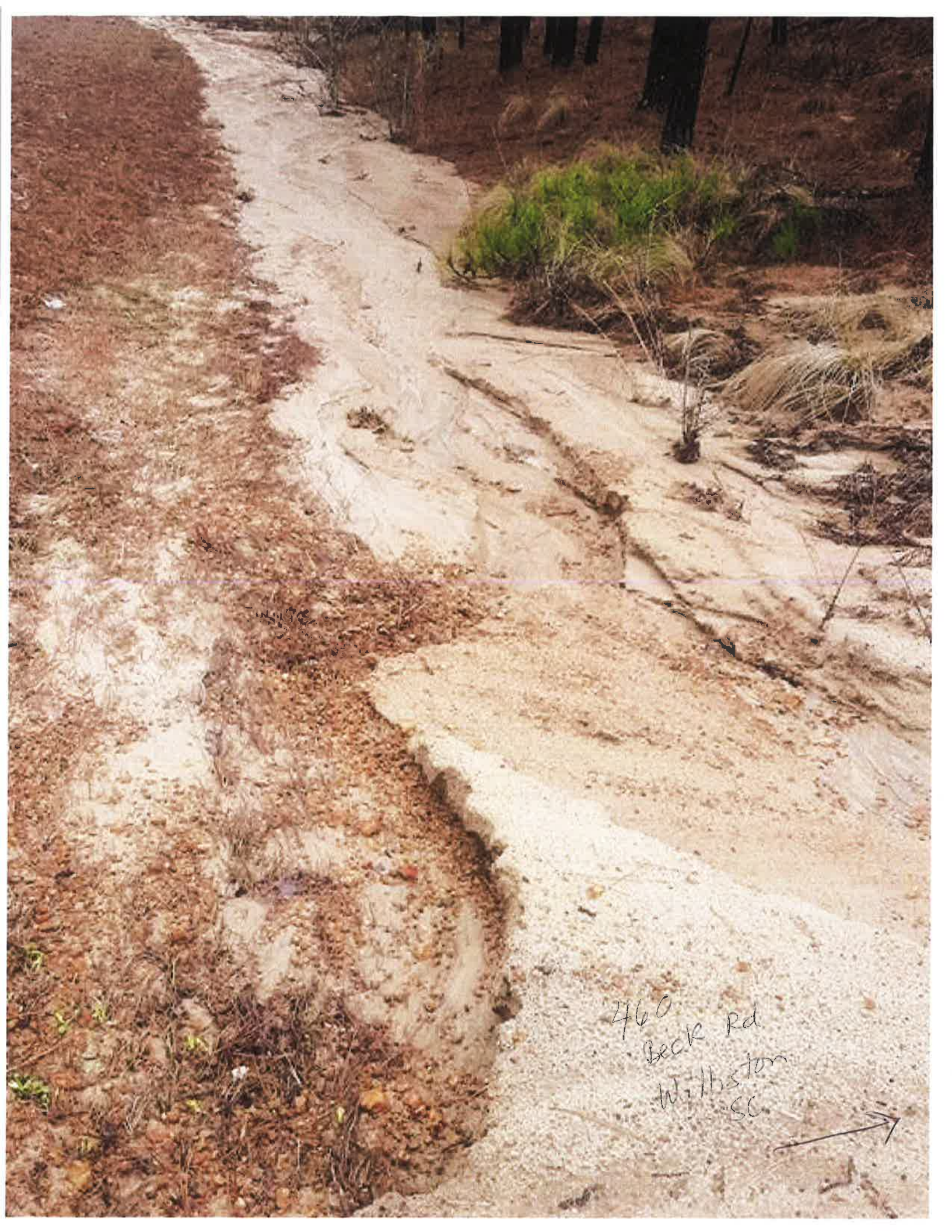


J



Chicken  
manure  
sludge

culvert  
pipe



460  
Beck Rd  
Williston  
SC

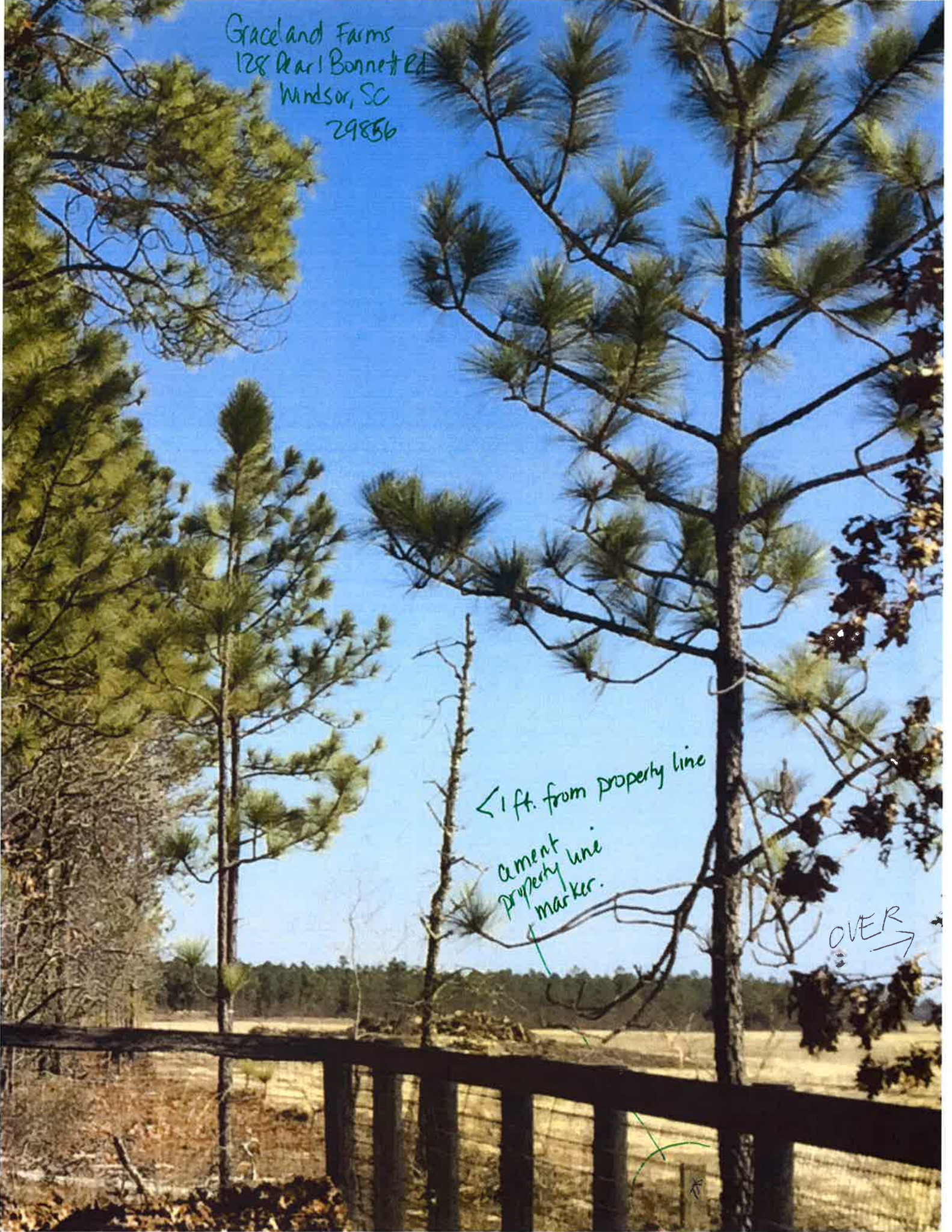


Graceland Farms  
128 Pearl Bonnet Rd  
Windsor, SC  
29856

< 1 ft. from property line

Cement  
property line  
marker.

OVER →



DJI\_0031.JPG

Open with



Bennett Mill ~~Bennett~~  
 Pond → Longs Branch Creek

DHEC  
 oversight  
 committee  
 1/24/17

Contact info:  
 Nancy Tomlinson  
 Nancy 257 3032  
 803 257 3032  
 n.t.tomlinson@dmr.com  
 as SmartTrails.com

JHEC Oversight Committee

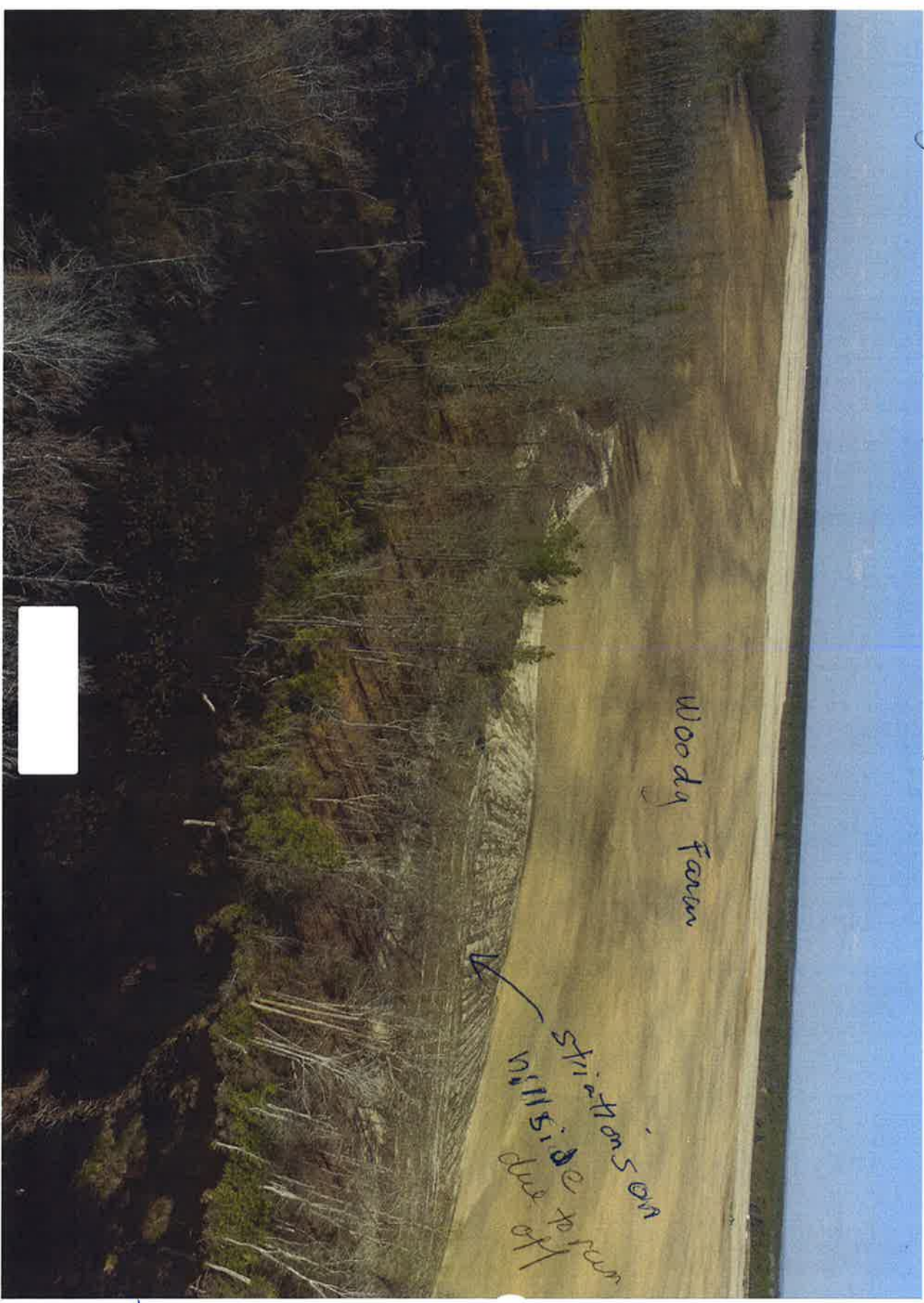
1/24/17

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Contact info:

Nancy Tomlinson 863 257 3032 - ajtheng@smc.vt.edu

Open with



Woody Forest

Striations on Mill side due to run off



Bonnett  
mill  
Long  
Creek

Hense DHEC Oversight Comm.  
1/24/13



Bennett Mill Pond  
460 Beck Rd

Long Branch Creek →  
Edisto River

contact info  
Nancy Tomlinson  
803 257 3032



**Thomas Effinger**

## Opportunity for Public Testimony about the Department of Health and Environmental Control, January 24, 2017

First, on behalf of SCANA and SCE&G, I would like to thank the Legislative Oversight Committee for the opportunity to comment about the South Carolina Department of Health and Environmental Control and its ongoing stewardship of South Carolina's vast natural resources. During the industrial revolution in the 1800s, our nation grew at an enormous pace in large part due to our increased ability to harness energy from those natural resources. Over time, however, it became clear that responsible use and management of those natural resources would be necessary for sustained growth and prosperity.

Today, converting energy from flowing rivers, burning fossil fuels, harnessing the sun and wind, or splitting atoms to produce electricity has allowed the United States and South Carolina to improve the quality of life for all people and to foster economic development and the well-being of resident communities. Electricity is the engine that powers all critical infrastructure in our communities – hospitals, assisted care facilities, and law enforcement offices just to name a few. Simply put, electricity is essential to the economic health and viability of our country. SCE&G's use of natural resources to provide safe, affordable, reliable and environmentally responsible electricity to South Carolinians receives constant regulatory oversight and permitting activity from DHEC as a steward of the State's natural resources. DHEC fulfills its role in a collaborative way that values and respects the input of all stakeholders. DHEC has identified four non-negotiable core values on its website: Embracing Service, Inspiring Innovation, Promoting Teamwork, and Pursuing Excellence. DHEC's leadership promotes those core values, and we observe their staff demonstrate these core values every day. Let me provide just a few of our experiences where DHEC has exceeded the standard observed in many other states.

As a State agency, increasingly, DHEC is tasked to develop and implement State laws and regulations to match rules handed down by the federal government, often without additional resource funding. Usually, if the rule is significant or novel, DHEC will request affected stakeholders to come together and discuss issues, challenges and synergies in an effort to shape the State regulation to achieve the greatest benefit for the citizens of South Carolina, while remaining true to its intent. The process doesn't always end with unanimous agreement, but there is always a healthy respect for the diverse concerns expressed by all the participants.

A recent example of DHEC's leadership with emerging regulations is in the area of carbon regulations to control greenhouse gases from electric generation. Early in the process, DHEC organized a stakeholder group to discuss ideas and methods so that the results could be provided to assist EPA with the development of federal regulations. Stakeholders included utilities and cooperatives, representatives from government agencies, industries, environmental justice communities, and environmental non-governmental organizations. Working together, the coalition of stakeholders were able to develop a set of guiding principles that set the tone for crafting constructive comments back to EPA, and led to a healthy discussion of the infrastructure that will be needed for compliance with the final federal rule. As a result, the State of South Carolina received national attention and the stakeholder process was viewed as a model for other states to emulate in developing the infrastructure required by the rule. Even though the rule is on hold during a legal review, DHEC was the leader that brought the diverse group of stakeholders together to manage an outcome for the benefit of all South Carolinians.

Another issue receiving a lot of national attention relates to water use and availability. Growing population and energy use continues to stress the availability of water for energy generation, drinking water, recreation, agriculture, fish and wildlife, and other important uses in South Carolina. Through proactive leadership, DHEC and the South Carolina Department of Natural Resources are developing basin-wide surface water models to assess existing surface water systems and demands in South Carolina, as well as updating DNR's State Water Plan. This is being done with the support and input of a technical advisory team made up of diverse stakeholders. The results of this assessment will provide a decision-support tool for surface-water permitting, water-policy development, water planning, and drought management.

In summary, we support these approaches taken by DHEC to fulfill its mission of protecting the State's natural resources. By organizing statewide, collaborative partnerships, South Carolina as led by DHEC, is taking proactive steps to shape emerging national standards. It has been our observation that DHEC remains committed to working with all stakeholders to ensure that national rules are developed in a manner that provides maximum flexibility for implementation at the state level. DHEC does a good job of making sure the rules are tailored to meet our state's unique economic challenges. They ensure it's right for South Carolina.