

<p>March, 2011 Publication #6</p>	 <p>“Current” News From the North Canadian River 319 Project</p>	<p>Monty Ramming Project Coordinator (405) 545-0317</p> <p>Debi Carnott Education Coordinator (405) 884—2868</p>
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- Mike Crowley,**
Producer /Mayor, Calumet
- Dan Wedman**
Producer, Calumet
- Terry Floyd**
City of El Reno
- City of Yukon**
Open
- City of Mustang**
Open
- Town of Canton**
Open

**To Soil Farm.....or Not To Soil Farm?
That's a Good Question!**

This question is cropping up more and more. To help you make your decision, below is advice from several sources.

Oklahoma Corporation Commission: (Taken from OCC Form 1014CS "Application for Commercial Soil Farming")

1. Soil farming shall **not** be done:
 - During precipitation events or when precipitation is imminent.
 - When soil moisture is at a level such that the soil would not readily take the addition of drilling fluids.
 - When the ground is frozen; or
 - When the wind velocity is such that even distribution of materials cannot be accomplished or the buffer zones cannot be maintained.
2. No soil farming shall be done within:
 - 100 feet of a property line boundary.
 - 50 feet of any stream not designated by Oklahoma Water Standards.
 - 300 feet of any actively producing water well used for domestic, irrigation, or industrial purposes; or
 - 1300 feet of any actively producing water well for municipal purposes.
3. No runoff or ponding of soil-farmed materials shall be allowed during application.



More advice from the "Noble Foundation"

Excerpts taken from "Drilling Mud—Application to Pasture and Farmland" by David Annis

"Before you have drilling mud applied to your property, you need to have multiple, specific tests run on your soils and on the composition of the drilling mud. This involves having the materials analyzed as a saturated paste extract and determining if heavy metals are present. Then you will need a qualified professional determining the amount that can be safely applied to your property and if any other soil amendments will be required.

I cannot express enough the importance of developing a formal (lawyer approved) contract with the company Take time to educate yourself since each state has different regulations covering the application of drilling mud and fluids."

Contact us for a complete print-out of these and other publications concerning soil farming

Texas A & M. (Excerpts taken from SCS-2009-08 "Land application of Drilling Fluids: Landowner Considerations")

"No single measurement, such as a simple chloride analysis is sufficient to properly evaluate and manage drilling fluid disposal." according to Texas A&M. They recommend the following tests be ran.

1. **Total salts**—measured as the electrical conductivity (EC) of the saturated paste Extract and reported in parts per million (ppm) or millihos per cm (mmhos/cm).
2. **Extractable individual ions:** calcium, magnesium, sodium, boron, Chloride, and sulfate—sulfate measured in the saturated paste extract and reported in milligrams per kilogram (mg/kg) or ppm.
3. **Sodium Adsorption Ratio (SAR)** - calculated from the saturated paste analyses for calcium, magnesium, and sodium.
4. **Total heavy metals**—arsenic, barium, chromium, copper, lead, nickel, and zinc reported in mg/kg. (Heavy metals are elements that may or may not be plant nutrients, but can be harmful to plant and/or animal health in low to high concentrations depending on the element. Others can accumulate in plant tissue (without harm to the plant) to levels which are harmful or toxic to animals and/or humans.)
5. **Total petroleum hydrocarbons (TPH)** - drilling fluid only, reported in mg/kg.
6. **Routine+micronutrient soil nutrient test**—pH, and extractable nitrate-nitrogen, phosphorus, potassium, calcium, magnesium, sodium, sulfur, copper, iron, manganese, and zinc.
7. **Soil texture**—native soil only.
8. **Cation exchange capacity**—native soil only. "

The purpose of the North Canadian River 319 Project is to reduce pathogens and sediments from entering the river from private lands. Testing at locations along the North Canadian River have repeatedly exceeded Oklahoma water quality standards for fecal coliform as well as turbidity. The four conservation districts in the watershed proposed the project as a pro-active, voluntary effort, installing best management practices that will help achieve pathogen and sediment reductions *through voluntary efforts.*

Upcoming Area and State Events

April 8 & 9- "Healthy Soils, Healthy Livestock Grazing Workshop"
Kerr Center in Poteau. Kerrcenter.com (918)647-9123

April 13-Ag Day at the Capitol

April 27-OWRB Public Meeting in Clinton on State Water Plan

April 28-OWRB Public Meeting in Enid on State Water Plan

May 26-OWRB Public Meeting in OKC on State Water Plan

OWRB (Ok Water Resources Board) website has details

April 21-Grazing Workshop I, Noble Foundation \$20.00
www.noble.org/AgEvents (580)224-6411

April 26-Dewey County Natural Resource Day

April 27-Blaine County Farm Safety Day

June 7-Basic AG Summer Management Seminar, Noble Foundation

June 16-Grazing Workshop II, Noble Foundation (same as above)

July 12 & 13-Blue Thumb Stream Monitoring Workshop,
Redlands Community College, El Reno

July 22 & 23-No-Till Oklahoma, Norman

No-till Quote of the Quarter

".....As long as the head stays conventional it will be difficult to implement successful no-tillage in practical farming. We believe that a farmer first has to change his mind before changing his planter.."

~ Rolf Derpsch

My No-till Contract has almost ran it's 3 years.....what do I do now?

I know some of you are nearing the end of your 3-year no-till contract with the 319 project and wondering if you're going to continue no-tilling. Before thinking it's been a disaster and pulling the plow out, take a few moments to consider the.....

The Four Phases of No-till

Phase one: Initialization (0-5 years). This level is the basic, primary, or fundamental stage where the beginning processes start their transformation from low soil organic matter and low residues to begin regenerating soil structure and an increase in microbial activity. This stage requires additional nitrogen.

Phase two: Transition (6-10 years). This phase represents a shift, passage or transformation into the next level of no-till. Soil organic matter accumulates, residues increase, soil aggregation and microbial activity elevates. *Phosphorus accumulation, nitrogen immobilization and great mineralization are also experienced.*

Phase three: Consolidation (11-20 years). A strengthening, solidification and/or fortification featuring increased carbon accumulation, residues and additional available water in the soil occurs. *This is accompanied by nitrogen mineralization and greater immobilization with an increase in cation exchange capacity and greater nutrient cycling.*

Phase four: Maintenance (+20 years). Sustaining, continuance, upholding or preservation best describes this final stage wherein a continuous flow of nitrogen, carbon, and high residues are common. *Greater available water in the soil and high nutrient cycling with increased nitrogen and phosphorus attainability are achieved.*

Source: Adapted from Joao Carlos Moraes Sa, 2003

We all live downstream. What we do on our land...whether a backyard, farm, small business or factory site, affects us all. Our choices and actions affects our streams, rivers, ponds, lakes, and yes...home wells and livestock water. Clean water starts with us. To learn more on what you can do to help, contact the North Canadian River 319 Project at (405) 884-2868.

The North Canadian River 319 Project is sponsored by the Oklahoma Conservation Commission, the Environmental Protection Agency, and your local conservation districts. This publication is issued by the Oklahoma Conservation Commission as authorized by Mike Thralls, Executive Director. One hundred and nineteen copies were produced and distributed at a cost of 2.4 cents each. Copies have been deposited with the Publications Clearinghouse of the Oklahoma State Department of Libraries.

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