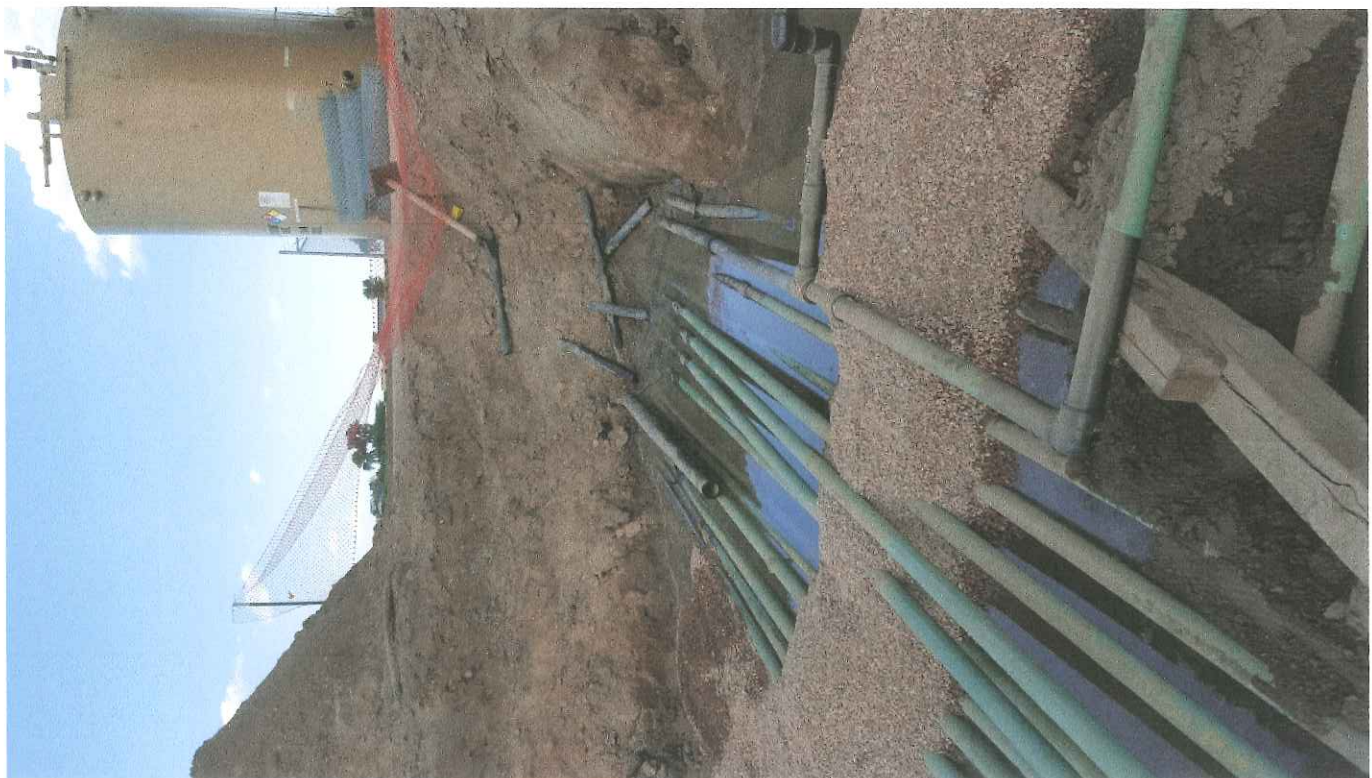
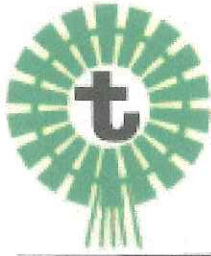




Gas Well Company Tring to do some repair work. They had to bring in a pump in order to get the water down low enough to do the repair work.





PRO AG APPRAISAL

Chase W Johnston
Certified General Appraiser

To Who It May Concern:

This letter is in regards to the ground water issues that I have on my personal residence. My property is located at 25425 WCR 53 Kersey, Co 80644. My wife and I have owned this property since March of 2012. There was minimal standing water on the property when we purchased it. According to the prior owners of the property there was no standing water or ground water issues until 2005.

We built a riding and roping arena adjacent to a small amount of standing water on our property in 2013 and it is about two feet higher than the standing water. In the last four years our ground water issue has significantly increased, which has caused standing water in or corrals and we haven't been able to use our riding arena. Our horses and cattle often times are standing in water and last spring we had to move them to higher ground due to the amount of water in their pens.

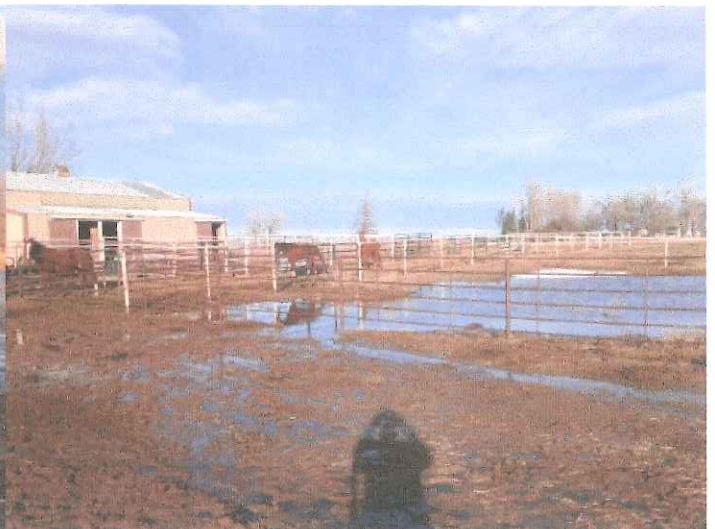
I have many concerns due to these ground water issues that have significantly changed since the purchase of our property. I have underground water lines and electrical lines that are most likely submerged under water. Another concern that I have is the health of my family and livestock. Last spring when I pumped water out of the low lying area, I ingested some of the water which caused me to have to go to the emergency room. On top of that one of our horses got Leptospirosis from the standing water and late last fall two of our horses got West Nile also from the standing water.

I am also a rural agricultural appraiser and I have noticed many agricultural properties and farms in the Weld County area that now have standing water where they were once productive farmland.

I hope my testimony and concerns have helped the raise the awareness of the ground water issues in our area. Attached are some pictures that my wife has taken of our property in the last year.

Best Regards

Chase Johnston
970-302-9365
ProAgAppraisal.com



House Bill 1278 Final Report

January 22, 2014

Time 1:19:15 – 1:21:17

Representative Lori Saine

"So Reagan, you had said there is a problem with direct attribution so we have to rely more on correlation, but you have identified some localized areas and you've made some recommendations for long-term mitigation of high water tables. Is there any short-term solution you can see that we can utilize right at this moment?"

Dr. Reagan Waskom

"So the short-term solution I really think is in that first set of recommendations where I say let's make sure that new recharge structures are looked at carefully, particularly in areas where we know we have high groundwater, particularly in areas where we know we have urbanization. Let's look at it carefully there, and then the idea of let's get these pilots on the ground in those areas, specifically in those areas, and let's look at are there ways to differentially manage so that we utilize the resource, we don't restrict agriculture to pump or whatever, we pull down that water table to a good place and maybe we figure out how we use groundwater levels to manage the system. And, you know, I thought a lot about this as whether or not we could set up levels whereby, okay what has to be replaced is different, what can be pumped is different, it would take very good monitoring and modeling in order to do that. That would be quite a move for Colorado. That would be very sophisticated, finding out how we sustain these aquifers where we don't overdraft them, and don't overfill them, but just use them, would be a great thing and a great contribution globally if Colorado could figure that out."

Representative Lori Saine

"So are you recommending a real time data management system to be able to do that on these localized problem sites?"

Dr. Reagan Waskom

"Absolutely. I think that's what we need is, we need really good data, we need good localized models, and then we have to experiment, we have to look for better ways to do this."



Northern
Colorado
Geotech

2956 29th Street, Unit 21
Greeley, Colorado 80631
Phone: (970) 506-9244
Fax: (970) 506-9242

May 17, 2012

Glen Fritzer
20909 WCR 33
LaSalle, Colorado 80645

Re: **Groundwater Levels and Septic System Interaction**

Glen,

Based on our phone conversation, I would agree that we have noticed higher groundwater levels during our subsurface investigations here in Weld County in the past 4 or 5 years. This only constitutes our site observations, as the infrastructure network needed to monitor groundwater levels on a continual basis is currently not available.

As we discussed, there is potential for contamination of the groundwater from septic systems if the groundwater has risen. Septic systems require a minimum 4 feet of suitable soil above a "limiting zone". A limiting zone is a soil type that prevents the soil from acting as an effective filter of organisms and suspended solids from the effluent. Groundwater is also a limiting zone. If an older system previously maintained 4 feet of suitable soil, but groundwater has since decreased this zone, there is potential for contamination of the groundwater with septic system effluent (human waste). It could also be possible that higher groundwater would cause the effluent to come the ground surface instead of percolating down.

Another detrimental consequence of higher groundwater could be damage to basements and foundations of residences. Depending on the soil conditions under the residence, higher groundwater could lead to soft soils beneath a foundation, and obviously groundwater seeping into basements.

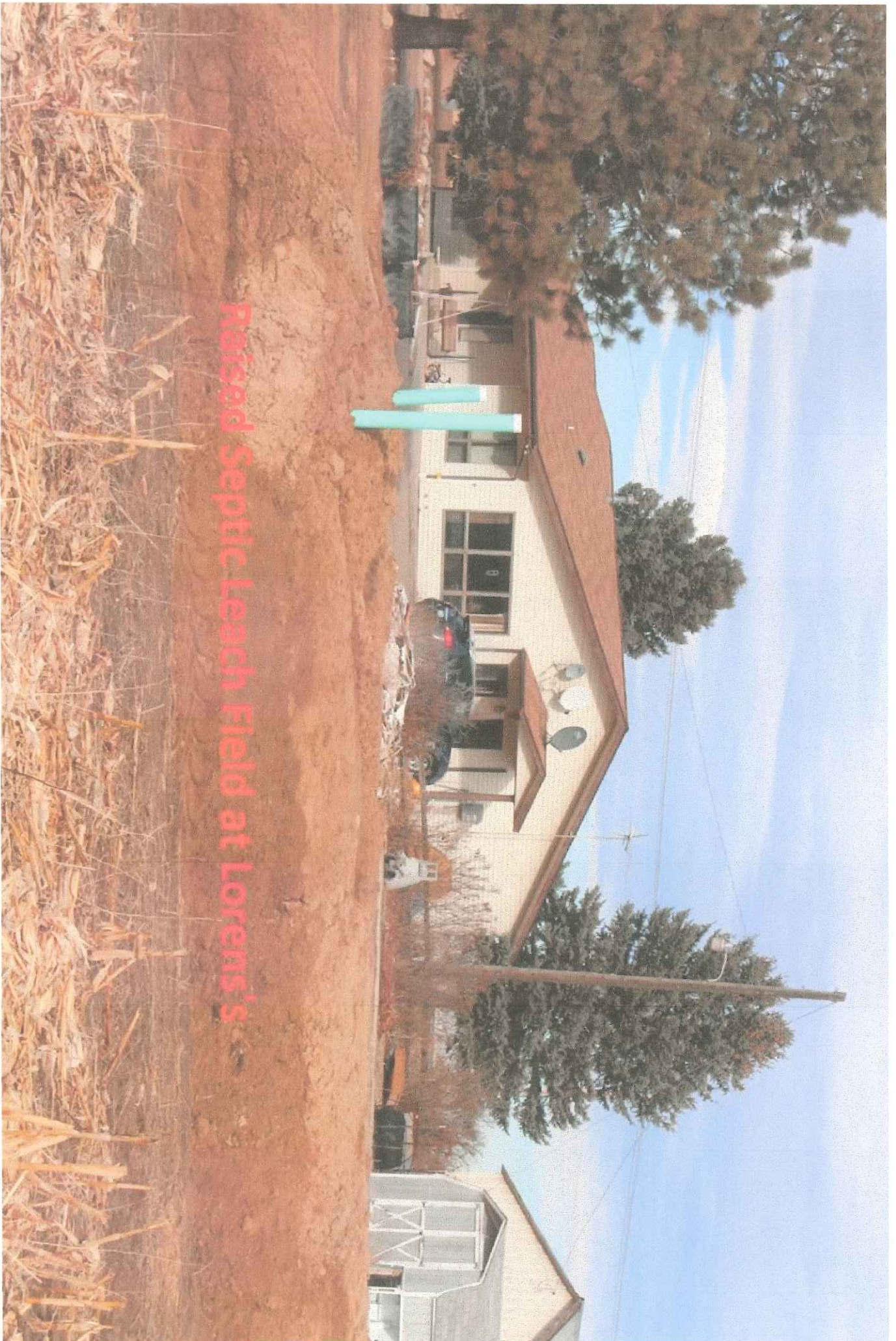
If you have any questions or if I may be of further assistance, please do not hesitate to contact me.

Sincerely,

NORTHERN COLORADO GEOTECH

Doug Leafgren, P.E.
President





Raised Septic Leach Field at Lorens's

Glen Fritzer

From: Brian Crosier <bcrosierpc@qwestoffice.net>
Sent: Saturday, March 26, 2016 1:30 PM
To: Glen Fritzer
Subject: Flooding Issues

Glen:

We moved to our present residence that includes 5 acres, south of Kersey at 25303 CR 53, in 1999. In the lowest area of our pasture, I would have to dig down 3 feet to encounter water. For the following 10 years we had no standing water issues, no matter how much it rained or snowed. Soon after the water wells in the region were shut down, water began accumulating in the lowest area of the pasture at the foot of our drive into a fairly large pond, after every rain or snow. At its worst, the accumulation would work its way across and degrade the common drive we share with the neighbors to the east and west of us, and add to the water problems of our neighbor to the north of us, where already their large pasture became a lake that encroached upon the horse corrals next to the horse barns. The water level for both of us would recede but not disappear until mid-summer. This has been the common theme the past few years.

When the flooding issues developed in our area, the neighbors two doors to the north of us had water accumulating in the Weld County ditch next to Road 53, and it would back up into their home and also cross the road to the east, as it had no place to go north or south. The County obtained a right-of-way across the road to the east, to an area with a large bed, placed a culvert under Road 53, and ran a pipeline to the bed. This alleviated the immediate homeowner's condition, but the subdivision near the area to the north of where the water was delivered started having flooding issues in the basements of the subdivision, and some had to install sump pumps.

Absent allowing a sufficient number of the wells to operate, we must decide whether to install a culvert under the common drive (which does nothing to help our neighbor to the north), and also raise the level of the common drive. Weld County had told us that they can take the water if we can get it to the Road 53 ditch, but that entails going uphill for both us and the neighbor to the north. Our neighbor has to pump the lake to move the water away from his horse corrals to another area of the pasture, and may have to continue doing so until mid-summer.

Thank you for this opportunity to raise our concerns.

Brian and Joann Crosier
25303 CR 53
Kersey, CO