Environmental Health report to the Board of Health
February 7, 2017

16-17 Fiscal Year Well Program:

Water tests: **154 (compared to 63 at this time last year)**

Well permits: **10 (7 at this time last year) – 1 irrigation, 4 CAFOs, 1 new construction, 2 bad wells & 2 geothermal wells**

Well closings: **12 (13 at this time last year) – including 3 cisterns**

Rehabilitated: **3 (3 at this time last year)**

The 2016-2017 Grants to Counties well program was originally the same amount as last year, which was $26,530. On February 3rd we were notified that we were reallocated an additional $9,286 which leaves approximately **$14,204.96** remaining after the allocation.

Septic

Permits: I have issued 63 permits in 2016 (compared to 65 in 2015). No permits have been issued for 2017 so far.

Radon

I've sold a total of 74 radon kits since starting the program in July 2015. Of those, 53 kits were sent in for analysis. I've attached a couple of graphs showing the results. For Radon Action Month this year, I had the bulletin board in front of our office and I posted some YouTube videos on our Facebook page. I sold 11 test kits during radon action month this year (compared to 9 last year). I also saw that the Extension office had put an article in the paper regarding Radon Action Month so I met with them and discussed joining efforts next year and possibly putting on a workshop.

Well Issues

I have a resident who put in a geothermal within the City limits of Clarksville a couple of years ago. Because of the limerock geology in Clarksville, they ended up drilling a pump and dump geothermal which consists of a supply well and reinjection well. The homeowners recently inquired about testing the supply well so they could disconnect from City water and hook up to their well for household use. I checked with the well driller regarding the efficiency of the system if using it for both and they thought there was enough cushion in the design that would allow little interruption if using it for both. He did recall a City council meeting where they discussed using this well strictly for geothermal and not drinking water. The City of Clarksville had a city council meeting last night and I'm waiting to hear back from them as to what the council discussed. The DNR states there is nothing on the private side that would prohibit them from doing this. If the City did not have an ordinance that would prohibit it, the only thing that

would be required would be to either disconnect completely from City water in order to meet certain setbacks or install a backflow preventer device that would keep the private well from cross contaminating the public water supply, which would require annual maintenance and sampling which can be rather expensive.

I had another inquiry regarding an irrigation well within City limits of Shell Rock for 2 acres of produce. The house would continue to be hooked up to city water so again there will be certain setbacks from the public water supply lines that would need to be maintained but otherwise this would be acceptable. I did check with the City of Shell Rock and they did not have any ordinances in place regarding wells within city limits and the well driller was planning to meet with the property owner to try and pin point potential usage and get the ball rolling for a water withdrawal permit from DNR if it would exceed 25,000 gallons per day.

GIS Mapping

At the IEHA conference I learned about a user friendly mapping program that a company had developed for a few counties in Michigan. I've learned about other similar programs other counties in Iowa have been utilizing and this one stuck out to me because of how easy to use it appeared to be. I contacted the company to figure out costs and they said they do the initial set up for free, which consists of putting together the map layers specific to the State of Iowa and Butler County (imagery, floodplain, wells, leaky underground storage tanks, parcel information, etc. – essentially building on the ArcMap data were already have) and then it would be a $4500 license fee every year or $4000/year if you went with a 2 year contract. I talked with Jennifer and we opted to sit in on a conference call that would show us a demo of the program and then they sent us a link to demo it on our own. I've attached a map print-off showing a septic system mapped out using their program demo as well as what I normally do now. I spoke with the company today to get some information on the differences between their program and the ArcMap we already have and they essentially use ArcMap as a backbone and then develop a workflow specific to the users need like Environmental and it's really designed to complement ArcMap. The benefits include the potential of adding a permitting component to the system to make things more 'digital' as well as allowing other users limited access, such as the public as a view only or your septic tank pumpers with the ability to go in an add a pumping record to a specific system. He also threw out there that they are really flexible with their clients and would be willing to consider a split-fee payment to help us get up and running if the budget was an issue.