Unofficial Transcript: Testimony of Steve George before the House Committee on Agriculture and Natural Resources, November 19, 2015

My name is Steve George and I live in the Yakima area. I've been involved with the Lower Yakima Valley Groundwater Management Area since it began in 2012. I also do some environmental consulting for the dairy industry and I've been working for them for approximately fifteen years. My comments today are my own and do not represent any other individual or organization or members of the groundwater committee. And what I'm going to talk to you about today is some of the things we've been doing on our groundwater management area as I do sit on the oversight committee, and how it can and is relating to this permit, uh draft permit. So our groundwater advisory committee is made up of a diverse group of interests which is good. We are now in our third year of operations with a goal of completing a plan to address nitrates in the groundwater by 2017. Lead entity is Yakima County. Once this is done the implementation plan will be put into place that will include well water monitoring. The plan will include best practices that have been identified to reduce nitrates in groundwater. It may also include recommended regulatory changes to better implement this strategy if necessary. However, an overarching goal is to implement voluntary practices first as they have been shown to meet goals faster and be less expensive to implement.

It's not been an easy task to get our arms around this issue as its very complex and there are very many components. It has been difficult to identify the causes associated with the sources, how much they contribute and what the best remedy will be. This is because practices and demographics can change and make past data out of date. The last thing we want to do is implement something of a strategy that is not based on current practices. Three main sources have been identified as potential contributors in our GWMA area: agriculture, domestic and

municipal. We have sub committees of the main GWAC group working on the steps, working on the individual components, but today I'm only going to focus on the agricultural part. We have found using data from our own area gives us the best information. While the use of models can be helpful, unless they have local up to date data they are much too broad to be specific enough to address our local issues. We recently reviewed a newly released USGS model that is supposed to track nitrogen molecules. A review by our contract hydrologist that works with us on the GWMA project is that any use of that model . . . revealed that the model is much too broad to use for our GWMA efforts at this time. And input from the agency staff that have reviewed it supports this view.

Getting data from local farmers has been a challenge due to the regulatory environment and citizen lawsuits. I'm going to echo a little of what Jay Gordon said here. Because we live with it every day in the Yakima. That seems to be where a lot of the action is. And I have lived with this and watched these people have to deal with it. The recent EPA order against four local dairies that drove one out of business and the subsequent citizen lawsuit that was settled for millions of dollars for the remaining three has cause real anxiety as you can imagine. They are reluctant to have their farming operation information up for public review even though they thought they were operating under current practices. The fact that no farmer has been proven to purposefully operated outside of established farming guidelines has not prevented an overzealous regulatory agency from taking action nor did it prevent the citizen lawsuit and the core sample that I mentioned is what Jay just showed you. There are studies, other studies, that are also helpful and this is the one that Jay had the last slide on that was done in 2012 by the University of California and basically found that 96% of the nitrogen contamination had come from the farmed land. The one slide that Jay did not show you was that those tons were converted to percentages and the

livestock and corrals and manure storage lagoons contributed to less than 1%. Our own information that we collected this past summer from corrals and compost yards in the Yakima Valley appears to support this research that livestock areas present very limited contributions. Because there is little specific data available we are able to secure cooperator dairies that allows us to sample their pen and compost areas to gather our own data. We took approximately 100 samples from several sites up to seven feet in depth. These samples that I helped gather, I actually provided the backhoe that did the digging, show that nitrogen is not leaching to groundwater from pens or compost yards.

From the information above for the livestock areas which has been provided to DOE it is very disturbing to see that they are pursuing a mandatory permit on the livestock industry based on their perception that lagoons and livestock production areas are the main sources contributing nitrogen to groundwater. Our data and data from California does not support this position and DOE has not provided us with any documentation specific to a lagoon that is leaching nitrogen to groundwater even though we have made repeated requests similar to what Representative Dent asked. I don't think he got a satisfactory answer. I believe you will find that the largest AG contributor in the Yakima area has been the past cropping practices - past cropping practices! leaving nitrogen legacy issues in the soil. It likely is not due to most current farming practices. This is because farming practices have changed dramatically in the past decade. The Roza Sunnyside Irrigation District's Board of Joint Control which has the vast majority of the irrigated land in our GWMA area received an environmental award for their extra ordinary efforts in reducing surface water runoff contamination within their districts. A big component of this work was the conversion of rill or furrow irrigation to drip and sprinkler – applied water – so there is no run off from the AG lands. These practices also have a positive effect on groundwater

contamination as well. Along with the conversion to drip and sprinkler irrigation fertilizer application is much more precise and is based on crop needs due to technologies that allow for better crop and soil testing and GPS tracking for applications.

These changes are not due to the formation of the GWMA, the draft NPDES permit or burdensome regulations but are due to economics, drought conditions and new technologies. They are also due to the fundamental belief by most farmers that production must be environmentally sustainable. Most farms must now be enrolled in some sort of stewardship program to market their crops. Forcing livestock producers to procure a permit to farm when they are clearly not the majority of the problem is discriminatory. Forcing livestock producers to create another manure management plan through regulation is repetitive and not based on current sound science. The DOE draft permit requirements would be running into what we are already working on in our GWMA area and current WSDA requirements for livestock producers. The regulatory approach is contrary to our voluntary approach and if enacted could actually slow down the process to aggressively work on nitrate contamination in our area. DOE staff are intricately involved with our GWMA process providing technical information and review. DOE has regulatory oversight for the GWMA and has a position on the oversight committee. It seems odd that the agency would be so supportive of our local efforts while pursuing a regulatory scheme at the same time that would. . appears to be subversive to our efforts. Better data combined with the implementation of technology is key to our success. Technology takes time to be developed and implemented. Unnecessary regulation is immediate and forces the regulated to have a very short term approach to comply that stifles innovation and does not allow for implementation of preferred alternatives. In summary I believe that our local GWMA effort is the best mechanism to address our local issues. Give us a chance to come up with local solutions

which we have put countless hours and a lot of tax payer money into. We are at the table. Let us do our work. We do not ask for more regulations and do not want them at this time. Thank you for allowing me to address the committee and I would entertain any questions.

One more quick point. I'd just like to make out. In the past testimony from the department staff they mentioned Darcy's Law as the prime candidate for coming up with their analysis of lagoons leak. The flaw with Darcy's Law is it's based on saturated conditions below lagoons. Our lagoons do not have saturated conditions below them and the other thing that is interesting is they noted that on a one acre pond or lagoon, their calculations are that it leaks a thousand gallons per day. So that's 365,000 gallons per year or 1.12 acre feet per year. I'm allowed in my irrigation district and so are the farmers that I represent, 3 acre feet of irrigation water. So I can apply 3 acre feet, I can fertilize my crops, I can apply 3 acre feet of water in that growing season which is a shorter time frame than the whole year that this scenario that the department came up with is putting 1.12, a third of the amount of water. If my 3 acre feet isn't pushing nitrates to groundwater, why would 1.12 acre feet be pushing nitrates to groundwater?

Thank you.