

April 7, 2015

To: House Committee on Energy and Environment

Rep. Jessica Vega Pederson, Chair Members of the Committee beth.patrino@state.or.us

Re: HB 3415:\_ 10-year moratorium on hydraulic fracturing in the exploration for and production of oil and gas in this state - SUPPORT

The League of Women Voters is a grassroots nonpartisan, political organization that encourages informed and active participation in government. Since the 1950's, the League has been at the forefront of national efforts to protect air, land and water resources. The League's position is that members work to "Preserve the physical, chemical and biological integrity of the ecosystem, with maximum protection of public health and the environment" with a focus on demanding pollution prevention. Additionally, the League's Social Policy is very clear; "Secure equal rights and equal opportunity for all. Promote social and economic justice and the health and safety of all Americans."

Our testimony in support of HB 3415 is consistent with the League's national position and focus on pollution prevention, and justice and public safety for all people.

We refer to a very extensive science-based report recently conducted by the New York State Department of Health which addresses environmental impacts and health hazards as reasons for supporting the ban. The research relies on multiple studies conducted across the country and highlights many concerns:

- **Respiratory health**: The report cites <u>the dangers</u> of methane emissions from natural gas drilling in Texas and Pennsylvania, which have been linked to asthma and other breathing issues. <u>Another study found</u> that 39 percent of residents in southern Pennsylvania who lived within one kilometer of a fracking site developed upper-respiratory problems, compared with 18 percent of those who lived more than two kilometers away.
- **Drinking water**: Shallow methane-migration underground could seep into drinking water, <u>one study found</u>, contaminating wells. Another <u>found brine</u> from deep shale formations in groundwater aquifers. The report also refers to <u>a study of fracking communities</u> in the Appalachian Plateau where they found methane in 82 percent of drinking water samples, and that concentrations of the chemical were six times higher in homes close to natural gas wells. Ethane was 23 times higher in homes close to fracking sites as well.
- Seismic activity: The report cites <u>studies</u> rom Ohio and Oklahoma that explain how <u>fracking can trigger earthquakes</u>. <u>Another</u> found that fracking near Preese Hall in the United Kingdom resulted in a 2.3 magnitude earthquake, as well as 1.5 magnitude earthquake.
- **Climate change:** Excess methane can be released into the atmosphere, which contributes to global warming.
- **Soil contamination:** One analysis of a natural gas site found elevated levels of radioactive waste in the soil, potentially the result of surface spills.

- **The community**: The report refers to problems such as noise and odor pollution, citing a case in <a href="Pennsylvania">Pennsylvania</a> where gas harvesting was linked to huge increases in automobile accidents and heavy truck crashes.
- Health complaints: Residents near active fracking sites reported having symptoms such as nausea, abdominal pain, nosebleeds, and headaches <u>according to studies</u>
   (Bamberger\_Oswald\_NS22\_in\_press.pdf). A <u>study in rural Colorado</u>, which examined 124,842 births between 1996 and 2009 found that those who lived closest to natural gas development sites had a 30 percent increase in congenital heart conditions. The group of births closest to development sites also had a 100-percent increased chance of developing neural tube defect.
- Other issues associated with Fracking:

California and a number of other states have had problematic underground aquifer contamination issues caused by fracking related waste materials illegally dumped into old wells. In addition, California and other western states effected by drought conditions are very aware of the excessive volume of valuable agriculture and or drinking water used in fossil fuel fracking processes.

It is in consideration of the above facts that leads the League to ask for your support for HB 3415.

Sincerely,

Robin Wisdom LWVOR President

cc: Representative Ken Helm

Margi Hoffman, Governor's Energy Advisor

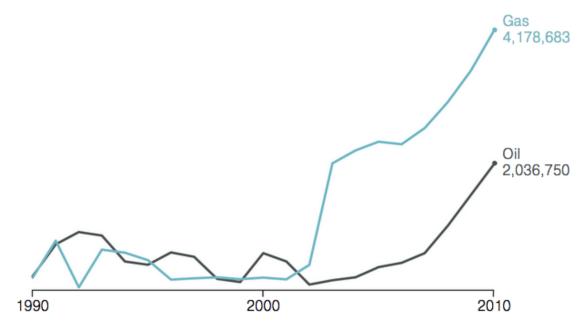
Claudia Keith

Natural Resources Portfolio Assistant

## Footnotes:

- <a href="http://www.theatlantic.com/national/archive/2014/12/the-alarming-research-behind-new-yorks-fracking-ban/383868/">http://www.theatlantic.com/national/archive/2014/12/the-alarming-research-behind-new-yorks-fracking-ban/383868/</a>
- <a href="http://news.nationalgeographic.com/energy/2015/03/150325-water-use-for-fracking-over-time/">http://news.nationalgeographic.com/energy/2015/03/150325-water-use-for-fracking-over-time/</a>
- <a href="https://student.societyforscience.org/article/fracking-wastes-may-be-toxic-tests-show">https://student.societyforscience.org/article/fracking-wastes-may-be-toxic-tests-show</a>

Water-based fluid used for horizontal fracturing in the U.S., 1990 - 2010 (gallons per well)



NG STAFF; J. L. WANG

SOURCE: UNITED STATES GEOLOGICAL SURVEY