



**LEAGUE OF WOMEN VOTERS®
OF OREGON**

The League of Women Voters of Oregon is a 97-year-old grassroots nonpartisan political organization that encourages informed and active participation in government. We envision informed Oregonians participating in a fully accessible, responsive, and transparent government to achieve the common good. LWVOR Legislative Action is based on advocacy positions formed through studies and member consensus. The League never supports or opposes any candidate or political party.

May 15, 2017

To: Senate Committee on Environment & Natural Resources
Senator Michael Dembrow, Chair
senr.exhibits@oregonlegislature.gov

Re: **HB 2711A: Imposes moratorium on use of hydraulic fracturing - SUPPORT**

Since the 1950's, the League of Women Voters 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 2711A is consistent with the League's national position and focus on pollution prevention, and justice and public safety for all people.

It is in consideration of the facts detailed below that leads the League to ask for your support for HB 2711A. The League has supported net zero greenhouse gas emissions before 2050 by implanting 8% annual GHGE reduction starting now. There are known issues with hazardous waste that may involve coal bed methane operations. Additionally, we are very concerned about "other ingredients" mentioned in this 2011 OPB article, "[Oregon Gas Drilling: Different Challenges Between Sandstone and Coal Beds](#)".

[Coal Bed Methane](#): Production is not without its environmental hazards. Water depletion from coal bed methane production can adversely impact adjacent residents, farmers and businesses that rely on local groundwater and surface waters. The saline and sodic quality of coal bed water can inhibit plant growth when discharged into local waterways. Chemical contamination resulting from hydraulic drilling can pose a threat to domestic, agricultural, and industrial water supplies and anyone exposed to such hazardous materials.

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

Respiratory health: The report cites the dangers of methane emissions from natural gas drilling in Texas and Pennsylvania, which have been linked to asthma and other breathing issues. Another study found 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, one study found, that contaminated wells. Another found brine from deep shale formations in groundwater aquifers. The report also refers to a study of fracking communities 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 studies from Ohio and Oklahoma that explain how fracking can trigger earthquakes. Another found that fracking near Preese Hall in the United Kingdom resulted in a 2.3 magnitude earthquake, as well as 1.5 magnitude earthquake. More recently, Oklahoma has experienced multiple earthquakes connected to well drilling.
- **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 toxic chemical 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 Pennsylvania 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 according to studies ([Bamberger Oswald NS22 in press.pdf](#)). A study in rural Colorado, 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 several 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 affected by variable drought conditions are very aware of the excessive volume of valuable agriculture and/or drinking water used in fossil fuel fracking processes.

Thank you for the opportunity to discuss this legislation.



Norman Turrill
LWVOR President



Claudia Keith
Climate Change Portfolio

Supplemental:

<http://www.opb.org/news/blog/ecotrope/what-was-in-coos-bay-gas-well-discharge-water/http://www.opb.org/news/article/coal-bed-methane-creates-coos-bay-challenges/>
<https://www.theguardian.com/us-news/2016/apr/07/wyoming-fracking-water-contamination-dangerous-chemicals>
<http://www.eenews.net/stories/1060047127>
<https://www.epa.gov/cmop/frequent-questions>
<http://www.theatlantic.com/national/archive/2014/12/the-alarming-research-behind-new-yorks-fracking-ban/383868/>
<http://news.nationalgeographic.com/energy/2015/03/150325-water-use-for-fracking-over-time/>
<http://www.wyohistory.org/encyclopedia/coalbed-methane-boom-bust-and-hard-lessons>
http://www.syracuse.com/news/index.ssf/2015/06/new_york_officially_bans_hydrofracking.html
<http://www.ecowatch.com/fracking-spills-duke-study-2276074733.html>