

# City of Brisbane

## Agenda Report

To: Honorable Mayor and City Council

From: Karen Kinser, Deputy Director of Public Works

Via: Randy Breault, Director of Public Works/City Engineer via City Manager

Subject: Proposed Ban of Hydraulic Fracturing

Date: February 4, 2016

### **City Council Goals:**

To develop plans and pursue opportunities to protect natural resources. (#8)

### **Purpose:**

Ban hydraulic fracturing, which has been shown to be harmful to the environment; and sign on to a letter to the Governor by the group Californians Against Fracking expressing the sentiment.

### **Recommendation:**

Accept the Open Space and Ecology Committee's (OSEC) recommendation to adopt Resolution 2016-05 to ban hydraulic fracturing, and sign on to the statewide coalition Californians Against Fracking's letter to Governor Brown to encourage the State to ban fracking in California. This recommendation is consistent with the community's value of being environmentally progressive.

### **Background:**

At the July 15, 2015 OSEC meeting, a desire to publicly state an opposition to fracking in Brisbane and in all of California was discussed. Fracking is a technique used to extract oil and natural gas from shale. The process has been known to cause significant environmental impacts such as: releasing dangerous levels of toxic air pollution creating smog, methane leaks during the extraction process, and health impacts on local communities, including incidences of increased cancer and birth defects, as well as increased seismic activity, waste of millions of gallons of water used for extraction operations, contamination of local water supplies and devastated landscapes once a site's supply has been diminished. OSEC understands that a ban of fracking would be symbolic in nature, as Brisbane is an unlikely candidate for fracking due to its size and lack of desired natural resources.

Fracking operations have expanded throughout Central, Southern and Northern California, the closest operation to Brisbane being in Monterey, California. OSEC expressed concern with the potential downstream effects that fracking may have in the future. Additionally, continuing these practices in California will make the efforts to reduce GHG emissions overall increasingly difficult.

In November of 2015, the Open Space and Ecology Committee forwarded their concerns and recommendations regarding a ban of hydraulic fracturing in a letter to the Mayor and City Council.

**Discussion:**

Californians Against Fracking is an environmental justice coalition composed of health, agricultural, political, faith and food and safety organizations. The goal of Californians Against Fracking is to call on Governor Jerry Brown to take the following actions to ban fracking: cease oil and gas extraction nearby areas that may contain sensitive receptors to protect them against the pollution generated by extraction operations, and phase out oil and gas extraction in the California in response to the climate crisis. Signing on to the Californians against Fracking letter to Governor Brown will aid in the process of banning fracking in California.

Taking a stand to ban fracking in California is an environmentally and socially responsible move. Banning fracking aligns with our goals to reduce GHG emission and to be environmentally conscious and progressive.

**Fiscal Impact:**

There is no immediate fiscal impact beyond the staff time already budgeted.

**Measure of Success**

The City of Brisbane joins other neighboring participating cities in campaigning against fracking in California and expressing the need to ban fracking to the State.

**Attachments:**

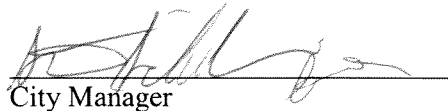
- Fracking Ban Recommendation letter from OSEC
- Resolution 2016 – 05 Ban of Hydraulic Fracturing
- Letter from the Mayor to Governor Brown



Deputy Director of Public Works



Director of Public Works/City Engineer

  
City Manager

## Open Space and Ecology Committee

### The City of Brisbane

November 10, 2015  
Honorable City Council Members  
City Hall 50 Park Place  
Brisbane, CA 94005

Dear City Council Members:

The Open Space and Ecology Committee (OSEC) has discussed hydraulic fracturing (fracking), and its ecological effects. Even though Brisbane's local ecology is not directly impacted by hydraulic fracturing, we are still concerned that the downstream environmental impacts will affect Brisbane. We are writing to encourage the City of Brisbane to join other cities and municipalities that are taking action to oppose hydraulic fracturing.

Hydraulic fracturing is a process used to extract natural gas and or oil trapped in shale and coal beds that are otherwise inaccessible. The energy companies dig wells, first drilled vertically, then horizontally, deep under the earth's surface. They then pump a highly pressurized mixture of water, chemicals and sand (slurry) down into the wells causing the rock to fracture, releasing gas and/or oil in large quantities. As with any enterprise, there are pros and cons.

The pros are obvious. Locally produced gas and oil is less expensive and reduces dependence on foreign resources. Energy companies hope to produce enough gas and oil to eventually export; each well can deliver 300,000 barrels of gas a day. Lastly, it creates thousands of jobs.

The cons are quite concerning. Currently there are approximately 500,000 active hydraulic fracturing wells in the US; each well can be fracked up to 18 times. A fracking job requires 1 to 8 million gallons of water and 40,000 gallons of chemicals. Fresh drinking water is used for hydraulic fracturing, which is trucked to the well sites. By the time a well is closed, it has used up to 72 trillion gallons of water and 360 billion gallons of chemicals. The energy companies are lucky if they can clean up half of the slurry, the rest is left in the ground to dissipate. The energy companies are not required to disclose what chemicals are used, and some sources have noted toxic and radioactive chemicals.

The energy companies claim there is no risk that the slurry could leach into the ground water. Unfortunately, studies show that methane concentrations are typically 17 times higher in the drinking water near hydraulic fracturing sites than elsewhere. This has led to nearly 1,000 reports of water contamination surrounding areas where fracking operations have occurred, resulting in a number of health issues when the water is ingested. Recovered slurry is left in open

pits; when evaporation occurs VOCs (volatile organic compounds) are released into the air, dramatically decreasing the air quality by creating ozone and acid rain.

Researchers from the USGS and the Oklahoma Geological Survey specifically mentioned that hydraulic fracturing contributes to occurrence of earthquakes. Oklahoma's earthquake frequency has increased from three per year to hundreds per year from 1990 to 2009. Living in California where we are prone to earthquakes, it would be prudent not to weaken the ground's integrity with hydraulic fracturing.

OSEC sees hydraulic fracturing as a potential for environmental disaster. Cheaper gas and oil does not outweigh the potential environmental impacts. Even though it may not initially affect Brisbane's ecosystem, which is not the case for other cities that have to fight the powerful energy companies to stop hydraulic fracturing, we feel that Brisbane should support those cities.

Please consider adopting a resolution to ban hydraulic fracturing in the City of Brisbane and sending a letter such as this to the State for consideration.

Thank you so much for your help,



Kim Hayuk, Chair of the Open Space and Ecology Committee

#### References:

1. <http://www.natureworldnews.com/articles/9011/20140912/the-pros-and-cons-of-fracking.htm>
2. [http://www.mlive.com/environment/index.ssf/2014/05/fracking\\_a\\_divisive\\_practices.html](http://www.mlive.com/environment/index.ssf/2014/05/fracking_a_divisive_practices.html)
3. <http://dangersoffracking.com/>
4. [https://en.wikipedia.org/wiki/Hydraulic\\_fracturing](https://en.wikipedia.org/wiki/Hydraulic_fracturing)
5. <http://www.livescience.com/34464-what-is-fracking.html>
6. [http://www.huffingtonpost.com/2015/05/18/texas-fracking-ban\\_n\\_7310072.html](http://www.huffingtonpost.com/2015/05/18/texas-fracking-ban_n_7310072.html)
7. <http://www.cnn.com/2012/06/15/us/fracking-earthquakes/index.html>
8. <http://www.msnbc.com/the-last-word/oklahoma-earthquakes-linked-fracking-study>
9. [http://www.huffingtonpost.com/2014/04/11/ohio-earthquakes-fracking\\_n\\_5136110.html](http://www.huffingtonpost.com/2014/04/11/ohio-earthquakes-fracking_n_5136110.html)
10. <http://www.dailyfinance.com/2014/09/12/fracking-earthquakes-risk-is-clear-who-pays-is-not/#!slide=2869928>
11. <http://www.nbcnews.com/science/fracking-practices-blame-ohio-earthquakes-8C11073601>
12. <http://www.reuters.com/article/2013/07/12/us-science-fracking-earthquakes-idUSBRE96A0TZ20130712>
13. <http://time.com/84225/fracking-and-earthquake-link/>  
<http://www.freerepublic.com/focus/f-chat/2877477/posts>

## **RESOLUTION NO. 2016-05**

### **A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF BRISBANE TO BAN HYDRAULIC FRACTURING IN CALIFORNIA AND TO SIGN ON TO STATEWIDE COALITION CALIFORNIANS AGAINST FRACKING'S LETTER TO GOVERNOR BROWN TO ENCOURAGE THE STATE TO BAN FRACKING IN CALIFORNIA**

**WHEREAS**, the climate crisis is a serious threat to current and future generations here in Brisbane and around the world; and

**WHEREAS**, the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report found that global warming is already causing costly disruption of the human and natural systems throughout the world including the melting of Arctic ice, the ocean's rise in acidity, flooding and drought; and

**WHEREAS**, almost every government in the world has agreed through the 2015 Paris Climate Deal that any warming above 2°C (3.6°F) rise would be unsafe, and efforts will be made to limit the temperature increase to 1.5 °C, and that humans can only pour about 565 more gigatons of carbon dioxide into the atmosphere to maintain this limit; and

**WHEREAS**, for the purpose of this ordinance, a "hydraulic fracturing operations or fracking" shall be defined as any operation currently in production, or site that has been devastated as a result of a fracking operation; and

**WHEREAS**, in its "Unburnable Carbon" report, the Carbon Tracker Initiative found that fossil fuels companies possess proven fossil fuel reserves that would release approximately 2,795 gigatons of CO<sub>2</sub> if they are burned, which is five times the amount that can be released without exceeding 2°C of warming; and

**WHEREAS**, according to the Natural Resources Defense Council, there are five major health effects associated with air pollution generated from fracking operations; respiratory issues, birth defects, blood disorders, cancer and nervous system impacts; and

**WHEREAS**, fracking fluid has contaminated rivers and streams after resurfacing. According to Greenpeace, over 3.6 million gallons of water are used per fracking site, rendering this water unsuitable for other uses. Fracking fluid pits, which store contaminated water, are shown to have caused human health concerns and animal fatalities. Overall, fracking operations devastate local environments and place water resources in danger of contamination; and

**WHEREAS**, the City of Brisbane has a responsibility to protect the lives and livelihoods of its inhabitants from the threat of climate change; and

**WHEREAS**, the City of Brisbane has adopted a Climate Action Plan in 2015. The plan is targeted to reduce energy use and carbon emissions. The community aims to reduce GHG emissions to 1990 levels by the year 2020, through energy use reduction; and

**WHEREAS**, the City of Brisbane believes that its stance on the environment and reduction of GHGs should support a future where all citizens can live healthy lives without the negative impacts of a warming environment; and

**WHEREAS**, nearly 200 organizations have endorsed or sent letters to the State, joining the coalition to ban fracking in California; and

**WHEREAS**, the City of Brisbane will not support hydraulic fracturing operations now and in the future.

**NOW, THEREFORE, BE IT RESOLVED**, by the Council of the City of Brisbane that the Council urges the State to ban fracking in California and will not allow hydraulic fracturing operations in the City of Brisbane.

---

Clifford R. Lentz, Mayor

I hereby certify that the foregoing Resolution No. 2016-05 was duly and regularly adopted at the meeting of the Brisbane City Council on February 4, 2016 by the following vote:

AYES:

NOES:

ABSENT:

---

Sheri Marie Spediacci, City Clerk

Dear Governor Brown,

California is on the precipice of scaling up its unconventional oil and gas development in the Monterey Shale formation. Yet, the best available science warns us that the process of unconventional fossil fuel development including shale tight oil and gas development using hydraulic fracturing, acidization, and other forms of well stimulation will exacerbate many of our environmental threats, particularly local air and water pollution and climate disruption. Moreover, because these techniques employ and produce extremely dangerous chemicals, the water that is used – sometimes millions of gallons at a time – is permanently removed from our supply. In the midst of a historic drought we cannot afford to simply dispose of this precious resource.

As local officials sworn to protect our communities and safeguard California's public health, economies, and environment, we respectfully urge you to enact a moratorium on shale tight oil and gas development using hydraulic fracturing and other forms of well stimulation until we have thoroughly and properly evaluated the potential health, economic, and environmental impacts on the state and the local communities we represent.

New York State has maintained a moratorium on fracking since 2010. Governor Cuomo has been quoted, "My point all along is to make the decision on hydrofracking based on the facts and on the science." The moratorium in New York State was recently extended until 2015 because the facts and the science leave many serious questions unanswered. In contrast, California is using fracking and other unconventional forms of extraction before studies are complete.

Therefore, we respectfully urge you to enact a moratorium on high-volume hydraulic fracturing until the following independent assessments have been completed.

- A comprehensive health impact assessment of the entire high-volume extraction process, including but not limited to direct and indirect health effects and cumulative health impacts;
- A thorough analysis that considers all potentially negative socioeconomic impacts, including but not limited to increased demands on local governments, first responders and law enforcement, and the effects of drilling on property values and home mortgages, existing businesses and economies, and local community character; and
- A thorough study of cumulative environmental impacts, including but not limited to the impacts on the rural landscape, water resources and threats of contamination, wildlife, air quality, and greenhouse gas emissions, and the lack of safe alternatives for wastewater disposal.

In light of the known environmental and health risks, we urge you to immediately place a moratorium on shale tight oil and gas development until it is determined by independent scientific studies whether and under which conditions these forms of fossil fuel development can be deployed in a manner that protects public health and safety, the conservation of the State's natural resources, and helps to achieve the climate goals set out by AB 32.

As local officials from across California, we share with you the responsibility to protect and defend our people and our state. Unless and until the facts and the science prove that high-volume hydraulic fracturing is safe, California needs a moratorium to keep it safe.

Now more than ever before, Californians need your strong leadership to protect our state and climate. Thank you for giving this urgent issue your full consideration.

Sincerely,

Clifford Lentz, Mayor

The following is a list of elected officials that have signed this letter (from Californians Against Fracking):

Susan L. Adams, Marin County Supervisor  
Jesse Arreguin, Berkeley City Councilmember  
John Avalos, San Francisco Supervisor  
Vinnie Bacon, Vice Mayor of Fremont  
Ana Barrera, CFT Civil, Human and Women's Rights Committee Member  
Tony Barrera, Salinas City Councilmember  
Tom Bates, Mayor of Berkeley  
Mike Bonin, Los Angeles City Councilmember  
Lili Bosse, Mayor of Beverly Hills  
London Breed, San Francisco Supervisor  
Desley Brooks, Berkeley City Councilmember  
Ken Brown, Sonoma City Councilmember  
David Campos, San Francisco Supervisor  
Laurie Capitelli, Berkeley City Councilmember  
Salud Carbajal, Santa Barbara County Supervisor  
Jose Castañeda, Salinas City Councilmember  
David Chiu, San Francisco Board of Supervisors President  
Al Clark, Carpinteria City Councilmember  
Pamela Comstock, Santa Cruz City Councilmember  
Neal Coonerty, Santa Cruz County Supervisor  
Jeff Cooper, Culver City Councilmember  
Xilonin Cruz-Gonzales, Azusa Unified School District Board President  
Bill Freeman, Hartnell Community College District Board Trustee  
Lucas Frerichs, Davis City Councilmember  
Laura Friedman, Glendale City Councilmember  
Phyllis Taub Greenleaf, Live Oak School Board Trustee, Santa Cruz  
Alan Haffa, Monterey City Councilmember  
Leslie Heebner, Deputy Mayor of Solana Beach  
Matt Huerta, Salinas Planning Commissioner  
Minane Jameson, Hayward Area Recreation and Parks District Board Member  
Dan Kalb, Oakland City Councilmember  
Ash Kalra, San Jose City Councilmember  
Rebecca Kaplan, Oakland City Councilmember  
Andy Katz, Director of East Bay Municipal Utility District  
Kevin KcKeown, Santa Monica City Councilmember  
Patricia Kernighan, Oakland City Council President  
Steve Kinsey, Marin County Supervisor  
Paul Koretz, Los Angeles City Councilmember  
John Leopold, Santa Cruz County Supervisor  
Paul Lewin, Palm Springs City Councilmember

Linda Maio, Berkeley City Councilmember  
Eric Mar, San Francisco Supervisor  
Margaret McAustin, Pasadena City Councilmember  
Gayle McLaughlin, Mayor of Richmond  
John Mirisch, Beverly Hills City Councilmember  
Daryl Moore, Berkeley City Councilmember  
Edward Neal, Lemoore City Councilmember  
Terry O'Day, Santa Monica Mayor Pro Tempore  
Susan Ornelas, Arcata City Councilmember  
Jane Parker, Monterey County Supervisor  
Micah Posner, Santa Cruz City Councilmember  
Marylou Powers, Mayor of Galt  
Jim Provenza, Yolo County Supervisor  
Carmen Ramírez, Oxnard Mayor Pro Tempore  
Katie Rice, Marin County Supervisor  
Robert Rivas, San Benito County Supervisor  
Albert Robles, Carson City Councilmember  
Dave Roberts, San Diego County Supervisor  
Meghan Sahli-Wells, Mayor of Culver City  
Brian Schmidt, Vice Chair of the Santa Clara Valley Water District  
Kathrin Sears, President of the Marin County Board of Supervisors  
Zareh Sinanyan, Mayor of Glendale  
Susan Sperling, President of Chabot College  
David Weinsoff, Mayor of Fairfax  
Susan Wengraf, Berkeley City Councilmember  
Scott Wiener, San Francisco Supervisor  
Ted Winterer, Santa Monica City Councilmember  
Dan Wolk, Mayor Pro Tempore of Davis  
Kriss Worthington, Berkeley City Councilmember  
Peter Zahn, Solana Beach Councilmember  
David Zito, Solana Beach Councilmember