Agriculture and High Volume Slick Water Fracturing Are NOT Compatible

Soil Contamination
Explosions, spills, flares and leaky gas pipes are all shown to have negative effects on agricultural soils. One study shows that gas flaring adversely affects soil fertility; causing the soil to become more acidic and reducing total organic carbon, nitrogen, and phosphate content. Another study reports that methane from pipeline leaks changed the oxygen and bacterial composition of the soil, and altered a plant’s ability to fix nitrogen, to successfully complete cellulose conversion, and to maintain an adequate hydration level.

Radioactivity
Naturally occurring radioactive materials (NORM) has contributed to widespread contamination of oil and gas production areas. In some cases contamination may be severe. Uranium, radon and other radioactive decay products may be prevalent in the air, in soils and even in drinking water at or near natural gas sites. Taken up by plants, these radioactive elements bioaccumulate in the foodchain, eventually appearing in milk and dairy products.

Heavy Metals
Similarly, heavy metals like arsenic, barium, cadmium, chromium, lead, and mercury may be found in drilling waste and can be absorbed by plants and incorporated into the food chain. While it is possible to decontaminate soil, it takes a minimum of four years of specific successive plantings to get these metals out.

Soil Erosion and Compaction
Soil erosion from well site construction is not as detrimental as compaction from hundreds of heavy truck trips, but in either case, farmers are finding restoration difficult, if not impossible.

Farmland Fragmentation
Every time a well pad or access road cuts across a farm field, it fragments productive farmland. As parcels become smaller there are fewer contiguous acreage available to operating farms. Eventually farms may become too small to operate profitably. As farms go out of business, the critical mass to economically support related businesses is reduced. Loss of those businesses leaves remaining farms without nearby supply or service providers. As a result other farms will inevitably fail simply from being caught up in the spiral.

Livestock Poisonings
Livestock often drink surface water from ponds and streams which is easily contaminated in the process of handling fracking fluids at the surface---injecting, withdrawing, collecting, storing and disposing of massive amounts of highly toxic liquids. Small spills can have very big effects on livestock by contaminating their drinking water or the grasses that they eat. Livestock are attracted to the saltiness of these fluids. There are growing documented reports of livestock illness and death from exposure to these spills.

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Water Usage
The natural gas industry points to agriculture’s water usage, but in making a comparison neglects to mention that their use is a consumptive one. Water used in agriculture remains in the hydrologic cycle, while most water used in gas drilling is lost forever.

Ozone Impacts & Decreasing Crop Yields
Gas drilling emissions lead to increased ground level ozone. Many long-term studies document serious impacts to agricultural productivity due to ground level ozone on. A declining crop yield depends upon the specific crop sensitivity, as are soybeans, alfalfa, clover and other native New York grazing grasses. Loosing such crops would harm farmers economically and negatively impact food production.

Openings for Invasive Species
When native grasses die out, invasive species move in and can overtake even healthy native plants simply due to their aggressive nature.

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Concern For Our Foodshed
A foodshed outlines a particular area from which food is grown, processed, purchased and consumed. Researcher Christian Peters and others at Cornell University mapped potential foodsheds for the largest upstate cities. Map b shows where grass-based agricultural products might travel in a more localized foodshed for the cities of Buffalo (red), Rochester (green), Syracuse (gold), Albany (blue), and Poughkeepsie (yellow). Notice the area in purple which indicates an excess of meat production for the southern tier cities (Alfred, Elmira, Binghamton) sufficient to supply NY City, but which overlies the Marcellus shale.

A Shrinking Agricultural Base
Pennsylvania agricultural agencies report that 25% of farmers receiving royalty payments discontinued farming, while another 25% converted from dairy farms to grazing operations. Agencies question whether the remaining small dairy farms provide enough of a critical mass to remain viable. If local farmers call it quits, then who will grow our food?

BETTER SAFE THAN SORRY …
“Ommegang believes that opposing development of hydrofracking is critical to the interests of our community, our people and our business. We are proud of our accomplishment in building a thriving, sustainable and environmentally conscious business in upstate New York. We are deeply concerned at the threat posed by development of drilling in the region and the risk to the purity of the water on which we depend, and which is a key reason we are located here. We are a company that enjoys a national reputation for super-premium quality beers produced in upstate New York and we hope that the state and local regulators attach value to what we do for the region in terms of employment and our representation of upstate New York in restaurants and grocery stores across the nation. We do not want our business’ future, our employees’ futures and our communities’ futures damaged or destroyed by water pollution, or compromised by the industrialization associated with hydrofracking for shale gas.”
-- Simon Thorpe, President/CEO of Brewery Ommegang, Cooperstown, New York

“I want to alert you to a less obvious effect that hydrofracking will have on us and on the NYS farms whose products we make a great effort to buy. We are very responsive to the needs of our shoppers. If hydrofracking is allowed to go forward our shoppers are certain to be asking us if the fruits, vegetables, dairy products, eggs and meats from New York State are produced in areas where hydrofracking is taking place. It will not take many inquiries for us to start researching alternatives to NYS products.”
-- Joe Holtz, General Manager of Park Slope Food Coop Inc, Brooklyn, New York

“If hydrofracking is allowed in our farming areas, our shoppers are certain to be asking us if the fruits, vegetables, dairy products, eggs and meats from Western New York are produced in areas where hydrofracking is taking place. It will not take many inquiries for us to start researching alternatives to WNY products.”
-- Tim Bartlett, General Manager of Lexington Co-operative Market, Buffalo, New York

THE TRADE OFF
Government is forcing farmers into a choice many don’t want to make. What is needed is an agricultural policy that helps farmers receive a fair price for their products. An energy policy that provides some cash at the expense of the health of the farm families, the safety and marketability of the food they produce, and the profitability of their farms is no substitute for good farm policy. We must do better than to put our water, air and soil, our food supply, the health of individuals and communities and the well-being of future generations at risk.

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FRACKING OUR FOODSHED
Is Local Food Production Compatible With Natural Gas Drilling?
Evidence and studies show that agriculture and industrialized natural gas drilling can not coexist (at least while drilling is in progress, and perhaps beyond) if we want a healthy, sustainable, local food supply.