

## Owego Forum Highlights Fracking Impacts

by Sue Smith-Heavenrich

*Broader View Weekly*, March 22, 2012

Close to 150 people crowded into Hubbard Auditorium in Owego on Sunday night, March 18 to learn how industrialized unconventional shale gas drilling and hydrofracking could affect communities in Tioga County.

Mark Trabucco, who moderated the forum, recalled a meeting 10 years ago in that very room when farmers, local businesses and residents generated thoughtful discussion on ways to make Tioga County a better place to live. “The number one concern was keeping the water clean,” Trabucco said. Clean air ranked fourth on the list. Both could be threatened by hydrofracking.

Seventy communities have already implemented frack bans to protect the health and welfare of their citizens, Trabucco noted. Others are working towards bans or moratoriums that will allow more time to study the issue. RAFT – Residents Against Fracking Tioga – one of the sponsors for Sunday’s forum, is currently circulating a “frack ban” petition in the Town of Owego.

Marcellus shale is one of many layers of hydrocarbon-bearing strata beneath Tioga County. It lies about 4,000 feet below Owego, said Bill Podulka. A physicist with a lifelong interest in energy and environmental issues, Podulka has spent the past four years studying drilling issues.

Although NY has had drilling for over a century, and some vertical wells use a kind of fracturing stimulation, the type of hydraulic fracturing seen in shale gas extraction is a new technology, he said. Combining hydrofracking with horizontal drilling introduces more chances for hitting natural vertical fractures in the rock, fractures that can link to aquifers. Also, Marcellus wells are much bigger than wells drilled into sandstone and other layers. “That large, intense industrial activity dominates the landscape.”

When he compared the average production of Marcellus wells to the number of days in production, Podulka found greater variability than expected. Although the industry speaks of the shale as a blanket play, horizontal well production is just as variable as that of vertical wells.

“It doesn’t matter how good state regulations are,” said Podulka, “things can and have gone wrong.” He listed example after example of spills, groundwater contamination and casing problems. He quoted a report from Schlumberger noting that over time all casings degrade. The company found gas outside the casings of 50 percent of wells they tested, wells that were only 20 – 30-years-old.

Dr. Adam Law, an endocrinologist practicing in Ithaca, addressed some of the health impacts from drilling. First, he clarified, “When we talk about fracking, we’re talking about the entire process ... from drilling to disposal.” One of the problems with studying health impacts is the lack of critical information; drillers aren’t required to publicly disclose the chemicals they use.

“There’s not much on public health in the [scientific] literature,” Law said. One study focused on groundwater in Pavillion, Wyoming. When the EPA drilled test wells to see what came up in the water they found benzene, methane and a host of volatile organic chemicals in the water. He also noted the air quality study in DISH, Texas and a recent study by Cornell veterinarians Michelle Bamberger and Robert Oswald, which focused on health impacts in humans and animals living near shale gas wells.

Of real concern, said Law, is a law recently enacted in PA that conflicts with medical ethics. The cornerstone of medicine is first, do no harm, he said. Second is informed consent. The new PA

law allows doctors to ask drillers what chemicals their patients could have been exposed to. But it prohibits the doctor from sharing that information with other doctors – and even the patients themselves.

For that reason the physicians – along with the NYS Assembly – is asking for a health impact assessment to be completed before allowing hydrofracking in the state. “Given the magnitude of [gas well] development and the paucity of data, we need to put drilling on ‘pause’ while we conduct a health impact study,” Law said.

Say “water contamination” and people immediately think of Dimock, PA. But Bradford County has seen its share of drilling-related water problems, say Carol French and Carolyn Knapp. The two dairy farmers addressed leasing problems, mortgage issues and the increasing prevalence of “water buffaloes”, those large plastic tanks, in their towns. French cited one neighbor who saw his \$395,000 home plummet in value once methane migrated into his water well. The drilling company installed a methane separator, and he’s got a water buffalo in a shed that matches his home’s architecture.

He’s also got increased electric bills (\$300/month to power the filtration system and heaters for the water buffalo) and plunks down another \$500/month for filter replacements, said French. What he doesn’t have: his property value – his latest appraisal is reported to be a fraction of his original cost.

French spoke about her own water problems, too. Her farm is surrounded by nine wells, all within a mile. Until last fall she hadn’t seen any problems with her water. Then one day she had pearly white water flowing out of her faucet. It settled into silt, with some oily gel on top. “I never had jell-o water before,” French joked. But it wasn’t funny – now her water had a decidedly metallic taste. Furthermore, her daughter became ill, as did neighbors. A couple of trips to the hospital and some testing revealed that she had an enlarged spleen.

Neighboring farmers have complained about rashes, intestinal problems, nosebleeds, fatigue and enlarged spleens and livers. French showed a rash on her arm; that’s from the water she rinsed with before milking – the water her cows drink. Two weeks ago the water changed again, and was white. She noticed rashes and dry patches on the skin of her cows. “We haven’t seen any reproductive problems ... yet,” she said.

After signing her lease, Knapp became a shareholder in Chesapeake Energy. She was astonished to read, in the shareholder report, an explicit warning about how very risky drilling shale gas is. “I resent that when they asked me to sign a lease they didn’t tell me this stuff.” As for that line about gas leases saving the family farm: “it’s nothing but a lie.”

Next week: why towns should enact a moratorium