

APPROVED 7-13-15

Regular Meeting of the Casco Township Planning Commission

June 3, 2015 - 7:00 PM

MEMBERS PRESENT: Daniel Fleming, David Campbell, Dian Liepe, Lewis Adamson, Paul Macyauski and Judy Graff

ABSENT: None

STAFF PRESENT: Susan West, Recording Secretary

1. Call to Order and review of agenda - Meeting was called to order at 6:59 pm. Chairman Fleming opened the meeting with the following comment. In the oath taken by each Commissioner, it states that we are to support the Constitution of the State of Michigan. Further, Chairman Fleming stated that it is always good for the Commissioners to review the oath taken and to remember that Townships are the foundation of a larger government.

There were no changes to the Agenda.

2. Approval of Minutes of the May 6, 2015 - Motion by Graff, supported by Campbell, to approve the Minutes of the May 6, 2015 Regular Meeting as written. All in favor, MSC.
3. Report from the Township Board Representative – Judy Graff reported on the May, 2015 Board Meeting as follows:
 - A. Regarding the Blue Star Trail, either Alan Overhiser or Bruce Brandon is looking into establishing an Allegan County Maintenance Authority Board to provide maintenance along the whole trail.
 - B. Regarding SHARP, Alan Overhiser stated that the property is back on the tax role and no further information was given regarding progress.
 - C. With Bruce Barker leaving the Planning Commission, Martin Super has expressed an interest in joining same.
 - D. Casco Township is asking the Allegan County Drain Commission to check into the “Murdoch Drain” problem. 103rd can’t be repaved until the drain problem is fixed. A map was provided at the meeting identifying the area that is being analyzed, which includes the area of 109th and Blue Star Hwy. and East a bit; and along Blue Star Hwy. to 196. Once the basic analysis has been completed, then all affected residents will be notified of a public hearing on same.
 - E. Officer Kurt Katje informed the Board that the police car has been received and necessary equipment is being installed. The car should be available for use in approximately 30 days.

Macyauski asked if the dog issue has been resolved and Graff stated that it had.

Macyauski stated that someone had dumped garbage on his property and that documents with an address on same had been turned over to Officer Katje, but that he has not heard the outcome. Graff stated that Officer Katje has stated that he is committed to every inquiry and to giving updates to anyone having an issue.

Liepe stated that earlier this week, a car was broken into at the Nature Preserve and that it was the State Police out of Wayland that handled the matter. Graff stated that a person needing assistance should call Allegan County and could then request Officer Katje, but that Officer Katje works three 12 hour shifts so is therefore not always available. Macyauski stated that the State, City and Township Officers all work together and that whoever is the closest may handle the matter.

4. Report from the ZBA Representative: Paul Macyauski reported the following:

A. There was one Variance granted last month to a resident in the AG District that wanted to add on to his pole barn.

B. Macyauski stated that part of the application for a variance includes the Standards and that they are not always completed. Further, it takes conversation with the applicant to get all the necessary information needed to make a decision, but that the ZBA serves the community and that it is always good to take the time to walk the applicant through the application.

C. There will be one request heard next month, but information is not yet available for same.

5. Report from Water/Sewer Representative - Lewis Adamson reported as follows:

A. Mandatory hook-ups have been at a standstill. When the attorney was asked about any progress, he stated that he had forgotten about the matter.

Macyauski asked if the attorney represents the Authority as well as the Township and Adamson responded that he does. Macyauski then asked if the attorney is under contract and Adamson answered that he is.

B. There were two connections last month. The required 17 ½ connections will not be met this fiscal year.

C. There is approximately \$127,000 less in the bank now than there was this time last year, but the bond payment will still be made.

Campbell asked if the overall picture looks good and Adamson stated that it does.

D. They have been assured that a new plant will not be built. There is approximately \$30 million being spent on improvements/repairs to the plant. Graff asked who will be paying for the improvements/repairs and Adamson stated that the City will be paying for most.

6. Resolutions requiring Planning Commission action: None

7. Old Business: hydraulic fracturing (fracking) / Minimum dwelling unit size in AG district

A. Regarding Fracking:

i. Chairman Fleming stated that, as a Planning Commission, we are limited in what action we can take.

ii. Chairman Fleming asked Tom Tucker, of 726 Blue Star Hwy., South Haven, MI 49090, to address the Commission. Mr. Tucker statements included the following:

- a. Mr. Tucker first asked the Commissioners if they knew what fracking is. All Commissioners stated that they do. Then, Mr. Tucker asked the Commissioners if they have heard that fracking is bad for the water and air. Graff stated that she had.
- b. That Saugatuck attempted to stop fracking and was unsuccessful, but that maybe Casco Township could discourage fracking by enacting certain anti-fracking ordinances, i.e.: that trucks can't be driven during certain hours, or water restriction ordinances.
- c. That he believes that the health of human's should be before profit. Fracking is stimulating to the economy, but there are bad things that can come from it, i.e.: air and water contamination.
- d. In Northern Michigan and in the Allegan Forest, land has been leased for fracking. People are being pressured into leasing their property. Slowly, fracking is coming closer to Casco Township.
- e. In 2016, fracking may be on the ballot and the issue will be decided by vote. But, until then, Townships should try to stop fracking and this should be done sooner rather than later.
- f. He has heard that some people have been able to light their water on fire because of fracking. Don Kuick, of 827 Blue Star Hwy., South Haven, MI 49090 stated that this has been proven to be fraud. Mr. Kuick further stated that it is illegal to frack on federal land.
- g. He has read that there have been twice as many earthquakes in areas where fracking is being done compared to where there is no fracking.

iii. Chairman Fleming asked Mr. Tucker for any written or contact information he had regarding this matter. Mr. Tucker provided three articles/brochures and same are attached hereto as Attachments 1, 2 and 3.

iv. Campbell asked Mr. Kuick for his opinion on fracking. Mr. Kuick answered that he is in favor of fracking and that it creates a lot of jobs.

v. Campbell stated that he heard this subject being discussed on a public radio show and they were saying what communities can do regarding this matter and that there are a lot of side issues to fracking, i.e.: the storage of the waste water. Campbell then stated that if someone has a strong opinion on fracking, they should let their government know.

vi. Graff stated that the State of Michigan's Legislature passed a law stating that the State will govern this matter and that she personally disagrees with this law. Graff further stated that the Planning Commission works for the health, welfare and safety of its residents so they have the responsibility to listen when concerns are expressed. Graff stated that personally, she is against fracking and believes that our water needs to be protected at all costs. Macyauski agreed and further stated that he wants to be more educated regarding this matter prior to same being on the ballot in 2016.

vii. Dan Cooper, of 7023 107th, South Haven, MI 49090 asked what percentage of the residents would need to state their concern for the Township to act on this matter. Macyauski

stated that he is not sure if the Township can act. Mr. Cooper stated that he believes the Township should investigate what action they can take.

viii. Graff stated that someone in Lee Township could be fracking underground in Casco Township.

ix. Graff stated that she personally believes that it would be hard for a small township like Casco to fight the State of Michigan on this matter. Graff then stated that many years ago, the Township spent much time and money to fight sand mining and lost.

x. Graff stated that an Ordinance can't be enacted that is prejudicial against a group of people. Ordinances have to be fair to all. You can't enact an Ordinance for the purpose of discouraging fracking. However, safety Ordinances can be enacted.

xi. Mr. Tucker stated that property values go down where fracking is nearby.

xii. Campbell stated that it was basically one individual who put together all the information regarding windmills that made a difference; so one individual can educate the Board and make a difference. Mr. Tucker asked what happened in that case and Graff answered that the Ordinance was updated to include safety requirements.

xiii. Mr. Tucker stated that he will forward additional information to the Planning Commission.

xiv. Graff stated that concerned citizens should address the Township Board. Mr. Tucker stated that the Board advised him to address the Planning Commission.

xv. Mr. Tucker thanked the Commission for their time.

B. Regarding Minimum Dwelling Unit Size in AG District:

i. Liepe asked if anything has been received from Ellingsen regarding this matter. Chairman Fleming stated that there has not and that Graff suggested that the Commissioners discuss this matter further so that it is clear what to ask Ellingsen for.

ii. Macyauski asked what the legal ramifications would be to eliminating the minimum dwelling size in the AG District. Graff stated that she believes that it would not be a legal issue.

iii. Graff stated that she had told Chairman Fleming that it was her personal opinion that the Planning Commission should have a good idea what they want to do and then let Ellingsen react to same.

iv. Campbell stated that he has seen no compelling evidence for the need of eliminating the 1,000 sq. ft. minimum building size requirement and that there may be 20 – 30 people that would be interested in building a small home and that a global change should not be made.

v. Liepe stated that she believes that a person should be able to do what they want with their property and if someone wants to build a small home, they should be able to do so. Liepe further stated that there are places where there are already homes under the 1,000 sq. ft. minimum requirement. Campbell stated that he does not believe an individual should be allowed to do whatever they want with their property and that this is why we have zoning. Campbell further stated that the existing homes that are under the 1,000 sq. ft. minimum requirement were built a long time ago. Liepe stated that she did not mean that she would like to throw out all zoning.

vi. Macyauski asked if it is certain that there would not be a legal issue in eliminating the 1,000 sq. ft. minimum requirement. Graff assured him that there is not. Macyauski then stated that the issue then becomes need. When an issue is re-occurring in nature, then the Planning Commission should take action, but that he has not seen this issue come before the ZBA.

vii. Chairman Fleming asked, from a health and safety point, why we have the 1,000 sq. ft. minimum building requirement. Macyauski stated that he wasn't sure, but if there isn't a health and safety reason for the requirement, then why should it be changed in only the AG District.

viii. Macyauski stated that there are lots in the Township that are so small that if a person wanted to build on same, they couldn't make the setback requirements, etc. and that these are the lots where there is a need.

ix. Graff stated that Chairman Fleming's son is an example of there being a need, i.e.: a young man that can't afford to build a large home. Graff then asked why the Township should require a young man, just starting out, to build a home larger than he wants.

x. Macyauski stated that 4 Commissioners have now expressed that they believe there is a need for allowing small homes and accordingly, the requirements should now be discussed. Graff stated that she believes the Commissioners all need to come to a conclusion before anything is asked of Ellingsen.

xi. Campbell stated that he does not believe there is enough of a need. Campbell further stated that it is the health requirements that make the small lots unbuildable, i.e.: distance between well and septic.

xii. Campbell stated that there has been zoning for over 20 years and that he has never heard of anyone requesting to build a small home. Graff agreed, but stated that this is 2015 and we need to consider where we are headed. Small homes are a safety, welfare and health issue. If young people can't afford to build in Casco, they will leave and it is better for everyone for young people to stay. Graff further stated that our seniors are another issue.

xiii. Campbell stated that the bottom line is the Master Plan and that the Master Plan is driven by the heritage families. Further, Campbell stated that Casco Township has two communities and that he doesn't believe the 1,000 sq. ft. minimum building size requirement should be thrown away for only 20 – 30 people. If there is a need for small homes, let's find an area where they can be allowed. Campbell then stated that maybe the Master Plan needs to be revised.

xiv. Liepe stated that when she was a single woman, she had to live illegally in a trailer (because it was a second home on a lot and she was not related to the property owner) because she couldn't afford a larger home and that she does not believe this was fair.

xv. Macyauski stated that he worries than if the minimum building size requirement is removed, very small homes could be placed every 250' East of Blue Star Hwy. and could be used as rentals. Macyauski then stated that if this were to happen, it would change the character of the community. Liepe stated that she does not see this happening and Macyauski responded that they are already being built in Hudsonville, MI.

xvi. Campbell stated that not all people in the AG District are on board with allowing small homes and that they expressed their concerns at the Special Joint Meeting. Chairman Fleming stated that there were also people in favor of allowing small homes.

xvii. Liepe stated that if someone wants to build a small home, they can ask for a Variance. Liepe then asked Macyauski how many people would need to appear before the ZBA asking to build a small home before he thinks the Planning Commission should act. Macyauski stated that if someone would appear before the ZBA asking to build a small home, they would go through all the required standards. If all the standards were met, then the variance could be granted. If, after many variances were granted, then the Planning Commission should act.

xviii. Liepe asked Chairman Fleming if he thought his son would consider appearing before the ZBA asking to build a small home. Chairman Fleming answered that he did not know.

xix. Chairman Fleming stated that he believes the Planning Commission should be able to defend and/or explain the need for every Ordinance.

xx. Macyauski stated that we should get an inventory of all lots under 60' and help them first. Campbell stated that small lot owners before the Ordinance was enacted were grandfathered in. But persons who purchase a small lot after the Ordinance was enacted should not be allowed to build. Graff stated that the Health Department will not allow building on these small lots.

xxi. Graff asked Macyauski if he thought a variance would be granted to an individual to build a small home. Macyauski answered hypothetically, that if the required standards were met, yes.

xxii. Chairman Fleming asked for public comment on this matter and received the following:

- a. Daniel Cooper stated that he doesn't believe there should be a minimum size requirement and that this requirement impedes on growth because some can't afford a big home. Mr. Cooper then stated that we don't know if there is a need because people don't approach the Planning Commission and that they just live with the fact. Therefore, there may be more of a desire for small homes than we think.
- b. Jeff Leach, of 6454 111th Ave., South Haven, MI 49090, stated that he believes that whatever size home someone wants to build is ok, but that a bunch of small rentals could be a problem. Mr. Leach then asked why the issue of cost can't be an issue to use when asking the ZBA for a variance. Macyauski answered that it is the way it is worded in the Ordinance Book and that maybe the wording should be changed.

xxiii. Liepe asked what was the need in having the 25' setback Ordinance. Macyauski answered that it is a health and safety issue, i.e.: being able to get a parked car off the road.

xxiv. Chairman Fleming asked why do we need a 1,000 sq. ft. minimum building size requirement if it is not a health and safety issue.

xxv. Adamson stated that he believes that the Ordinance should not be changed for a few individuals.

xxvi. Fleming asked if the Ordinance was originally changed to the 1,000 sq. ft. minimum requirement to prohibit trailers. Macyauski stated that it was. Chairman Fleming then stated that it was not a health and safety issue. Macyauski responded that in his personal opinion, it was not.

xxvii. Campbell stated that there shouldn't be a blanket change of eliminating the 1,000 sq. ft. minimum requirement and that possibly a district could be made where small homes

could be allowed. Liepe stated that she did not believe this would be a good answer because an individual may not want to build his small home in that area.

xxviii. Campbell stated that anyone wanting to build a small home could appear before the ZBA. Liepe responded by stating that many people get turned off by having to appear before the ZBA. Graff agreed. Liepe stated that we will never know how many people who wanted to build a small home did not proceed to the ZBA because of intimidation.

xxix. Macyauski stated that the ZBA helps the process by walking through the application and talking with the applicants to determine if the standards are met. Liepe stated that she believes people are still intimidated.

Graff stated that based on the fact that this topic has been discussed plenty and the fact that the Planning Commission is not prepared to make a decision on this matter in the foreseeable future, she was making a **Motion** that this matter be closed. Macyauski 2nd the Motion, stating that the Planning Commission should wait and see if there ever becomes a need. Liepe stated that she agrees that this matter has had much discussion, but that this is the first time the matter of eliminating the 1,000 sq. ft. minimum building size requirement in the AG District has been discussed. Liepe then stated that she believes the Planning Commission needs to do more investigation as to why we have this requirement in the first place. With 4 Commissioners voting in favor, and 2 Commissioners voting against, the Motion carries and this topic has been closed.

Campbell stated that the Township needs to look at ways to communicate the process of obtaining variances to the residents so they are not so intimidated. Mr. Cooper stated that he believes it will always be intimidating to appear before a Board and ask for permission to do something. Mr. Leach added that there is also the cost of appearing before the ZBA to consider. Adamson stated that an individual should first ask questions of Ellingsen before appearing before the ZBA so they are better prepared. Mr. Cooper stated that people honestly believe that going before the ZBA is a waste of time. Adamson responded by stating that this idea will not change unless people are willing to talk with Ellingsen.

C. Graff stated that after the last meeting, Chairman Fleming and she discussed the question of when do we go to an attorney regarding a matter. Since that time, Graff discussed this question with Ellingsen and was told that if it is a zoning ordinance change issue, the attorney should be contacted after the proposed wording has been finalized and is ready for the Township Board. If it is a site plan review issue, the Chairman may decide when to contact the attorney.

8. New Business: comments and suggestions for future meetings.

A. Campbell asked if the other Commissioners had received the draft of Minutes from the May, 2015 meeting and when will the Agenda for future meetings be available. Chairman Fleming asked the Commissioners when they would like to receive the Agenda and Graff answered that she would like to see the Agenda one week prior to the meeting. Macyauski asked if Sue West, the Recording Secretary, could e-mail the draft of Minutes to all Commissioners rather than having the Chairman forward them to the Commissioners. Fleming stated that this would be a good idea.

B. Campbell stated that it has been a year since the Planning Commission has made changes that would streamline and make Ellingsen's work easier and that he would like a report from Ellingsen reflecting how the changes have made an impact, if any. Graff stated that she agrees that the Planning Commission needs feedback. Chairman Fleming stated that he would ask Ellingsen for this information.

C. Graff stated that she would like to see time limits stated on future Agendas for the different topics to ensure that the meetings are finished by 9 pm.

9. Public Comment: None. Graff thanked the public for attending this meeting.

Motion to adjourn by Graff, 2nd by Macyauski. All in favor, MSC. Meeting adjourned at 9:11 pm

Minutes prepared by Susan West, Recording Secretary

Next Meeting: Annual Township Meeting on June 22, 2015 at 7 pm

Regular Meeting on July 13, 2015 at 7 pm

Attachment 1: Brochure entitled "Say No to Fracking"

Attachment 2: Article from FLOW (For Love of Water)

Attachment 3: Brochure entitled "Let's Ban Fracking Michigan"



Concerned Citizens for Fracking Awareness - West Allegan want you to know that on October 24th, 2012 the MDNR auctioned off the oil and gas mineral rights to 12,350 acres of the Allegan State Game Area including the Todd Farm.

We are concerned about:

- *damage to local infrastructure
- *local water supply
- *local well contamination
- *the risk to local agriculture
 - traditional & organic
 - row crops
 - livestock
 - berry fields
 - vineyards
 - orchards

We need uncontaminated and abundant water to provide local jobs, food, business and tourism.

We support MLAWD and their lawsuit to preserve and protect the Allegan Woods and State Game Area in Allegan County.

Concerned Citizens for Fracking Awareness- West Allegan*

Mission statement:

Our mission is to collect factual and pertinent information concerning Horizontal Hydraulic Fracturing (Fracking) methods used in oil and gas extraction. This information will be available for concerned citizens to share with their communities and local municipalities. We also align ourselves with similar local, state and national initiatives that address the variety of environmental and political issues related to Fracking.

CCFFA*

**members are residents of:
Ganges, Clyde, Lee, Casco,
Saugatuck and Laketown
Townships.**

We strongly encourage land owners to become informed and seek legal advice before signing away their mineral rights to an oil or gas company.

***Know the risk, weigh the costs
and benefits before signing.***

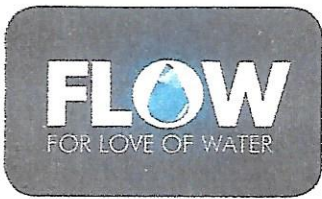
Be informed!!

www.mlawd.org

www.info@flowforwater.org

www.dontfrackmichigan.com

www.foodandwaterwatch.org



ADVANCING PUBLIC TRUST SOLUTIONS
TO SAVE THE GREAT LAKES

LEGAL STRATEGIES AND TOOLS TO EMPOWER LOCAL COMMUNITIES AGAINST THE THREATS FROM UNCONVENTIONAL HORIZONTAL FRACKING

The Great Lakes deserve great laws; the public trust is a key legal principle that enables citizens and governments to protect our waters as a commons, owned and shared by the public for the use and enjoyment of all. FLOW (“For Love of Water”) has been working since 2008 to advance public trust solutions to address the systemic threats facing the Great Lakes. The most recent threat has centered on the controversial extraction process of deep oil and natural gas formations within the Great Lakes Basin.

HYDRAULIC FRACTURING, OR “FRACKING,” IN MI
Hydraulic fracturing, or fracking for short, is a controversial method of natural gas extraction from deep shale rock formations.

Spanning across Michigan’s Lower Peninsula, the Collingwood/Utica deep shale, and A-1 Carbonate oil and gas formations are notably different than the Antrim shale formation developed in the late 1980s/early 1990s. Here are the key differences:

- **Depth:** The Collingwood/Utica/A-1 Carbonate geologic formation ranges from 5,000 to 10,000 feet deep, compared to the relatively shallow Antrim deposit, which is 600 to 2,000 feet deep.
- **Horizontal Drilling:** The Collingwood/Utica/A-1 Carbonate require unconventional horizontal drilling and fracking to capture the trapped natural gas as opposed to the Antrim’s vertical and slant drilling to tap isolated “reservoirs” of oil or gas.
- **Water Use:** Deeper geologic formations can require more than 30 million gallons of water and chemical/sand mixtures or more than 1,000 times more than used in a vertical or typical shallow Antrim well (30,000 gallons of water per well). Unlike normal water use where water returns to the watershed, “frack” water is permanently removed from the water cycle – either left in the fracked formation or discharged into deep injection waste wells.

A review of literature on fracking and its associated risks reveals several concerns: massive water withdrawals; surface and groundwater contamination;

surface spills and leaks; wastewater management; land use impacts; truck traffic and burden on infrastructure; lack of public disclosure; air pollution; and noise.

Since 2010, Michigan’s state land lease auctions for oil and gas exploration and development have rallied together citizens, property owners, and communities who are increasingly frustrated by the lack of adequate federal and state regulatory oversight, as well as the lack of state agency action to fully assess cumulative impacts to water, air, and land; and effectively oversee cleanups.

FLOW’S RESPONSE

Based on local, state, and national events and presentations over the past two years, FLOW recognized this growing and urgent need to develop sound legal strategies and policies for local governments to safeguard their communities against the unprecedented, huge, and cumulative impacts of fracking. This fact sheet and FLOW’s detailed policy paper intends to fill the void and empower citizens and local governments with existing legal strategies and tools, including the public trust.

LEGAL OVERVIEW: WHO IS IN CHARGE?

Citizens and communities located in Michigan’s oil and natural gas-rich basin have good reason to be concerned about the risks fracking poses to state waters and other natural resources.

- Natural gas and oil industry is largely exempt from key federal environmental laws, including the Safe Drinking Water Act and Clean Water Act.
- States are primarily responsible for regulating fracking activities, and yet this industry is largely exempt from key water statutes like Michigan’s codification of the Great Lakes Compact, which was designed to protect this treasured resource.
- Under Michigan’s Great Lakes Compact statute, local governments are expressly prohibited from enacting an ordinance that regulates a large quantity withdrawal (> 100,000 gallons per day).
- Under Michigan’s Zoning Enabling Act, local governments also are prohibited from enacting or

enforcing an ordinance that regulates permit issues related to the location, drilling, operation, completion, or abandonment of oil and gas wells.

If the federal government has deferred regulation of the oil and gas industry to the states, and the states have exempted the industry, and the local governments are prohibited from regulating the actual wells, *then who is regulating this industry? What can citizens and local governments do?*

LOCAL ZONING AND POLICE POWER ORDINANCES

One approach townships, cities, and counties can take is to adopt carefully crafted zoning or police power ordinances to protect Michigan's air, water, resources, and property and the health, safety, and welfare of residents and communities from the unprecedented impacts and harmful risks of fracking and related oil and gas drilling processes.

The two principle statutes delegating local government legal authority to address oil and gas development like hydraulic fracturing and related processes include the Michigan Zoning Enabling Act of 2006 and the Township Ordinance Act of 1945. Both Acts provide townships and counties legal authority to adopt either zoning ordinances that govern *land use or police power ordinances* that govern health, safety, and pollution issues associated with unconventional hydrocarbon development (e.g., massive water withdrawals, transportation, handling, and disposal of contaminated fracking wastewater).

Despite the Zoning Enabling Act's prohibition to regulate oil and gas wells or operations, *townships do maintain some zoning authority to regulate related oil and gas activities, such as natural gas pipelines, flow lines, gathering lines, treatment or production facilities, or compressors, water and chemical mixing stations, emission releases, high truck traffic and transportation issues, land impact, odors, noise, and handling, reuse, and disposal of wastewater, and hazardous solids or liquids.*

The Township Ordinance Act authorizes a township to adopt police power ordinances, which are distinct from zoning ordinances, because they can only regulate harms and activities rather than land uses. Thus, *townships could adopt police power ordinances that*

reasonably relate to the transport, disposal, and transfer, diversion, use, or handling of "produced" water and chemical mixing for fracking.

MICHIGAN ENVIRONMENTAL PROTECTION ACT

MEPA empowers each citizen of this State to act as a private attorney general "for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction." MEPA applies to oil and gas orders, permits, and proposed projects unless there exists "no feasible and prudent alternative." MEPA applies to agency actions approving, licensing, or permitting conduct likely to harm, impair, pollute, or destroy the "air, water, natural resources, or public trust" in those resources. MEPA is applicable at some stages in the local zoning process because zoning, as it authorizes land use, can ultimately affect natural resources.

Citizens can apply MEPA to intervene in permit and other government proceedings by both statute and common law authority. Townships can apply MEPA to amend and incorporate MEPA duties and standards into their existing zoning or police power ordinances.

FRACKING MORATORIUM AND BAN ORDINANCES

Another successful local strategy adopted by some townships is to enact a fracking moratorium ordinance that delays oil and gas exploration for a finite period of time (e.g. 6-12 months) so that the local government can study potential impacts. The Township of West Bloomfield, Michigan adopted a one-year moratorium in September 2012 to fully explore the potential irreparable harm to the natural resources and environment within the township.

If not drafted carefully, fracking ban ordinances may be more prone to claims of invalidity because they totally prohibit a land use within the township, which violates "exclusionary" zoning principles. In late 2012, the New York State Supreme Court invalidated the ban ordinance of City of Binghamton, New York. However, by tailoring an ordinance to a specific geological formation or a specific geographical area, townships may avoid the argument that there has been an outright prohibition of oil and gas development per se and categorical "takings" claims from the oil and gas industry.

FLOW is a 501(c)(3) nonprofit organization. Our mission is to advance public trust solutions to save the Great Lakes. Through our law and policy work, FLOW is raising public awareness about the public trust doctrine and its principles as a unifying framework to protect the commons and address systemic threats to water, public lands, and environment throughout the Great Lakes.

Let's BAN Fracking Michigan

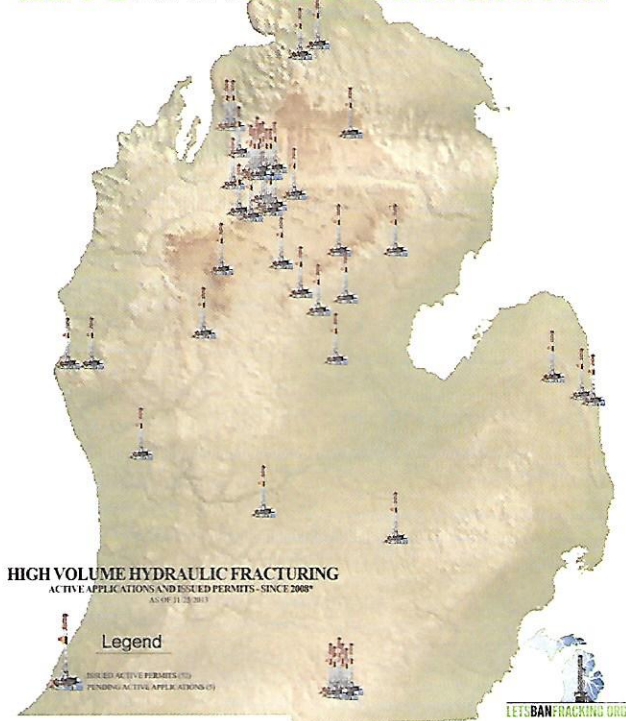


LETSBANFRACKING.ORG

What fracking is, how it is harmful, and why we must ban it

High volume horizontal hydraulic fracturing — commonly called *fracking* — was developed in the late 1990s.¹ After drilling the well several miles underground, first vertically and then horizontally, companies mix chemicals — many of them cancer-causing or neurotoxic — with millions of gallons of water and sand, then blast the mixture underground under intense pressure to break up deep shale or other rock formations and extract oil and natural gas.

LETSBANFRACKING.ORG



Michigan has already started this new kind of drilling — fracking — in the Utica/Collingwood shale and A-1 Carbonate formations. The first such high volume well was completed in Michigan in 2010 in Missaukee County. Approximately 57 wells were permitted from 2010 through the beginning of 2014, of which 10 are producing.² This new technique bears little resemblance to earlier fracking.

1 *Unearthed: The Fracking Facade*, documentary film, (starting at 3:40 mins). <https://www.youtube.com/watch?v=IPIEzSwPwT0>

2 http://www.michigan.gov/documents/deq/High_Volume_Hydraulic_Fracturing_Activity_MAP_423435_7.pdf Last accessed 5/29/14.

Only a ban can protect us

There is ample scientific evidence that no extreme energy extraction can be made safe. Fracking is inherently destructive to human health and the environment and has already done extensive damage in the 15 or so years it has been going on in the U.S. You'll hear that the industry is "well-regulated" and that improved regulations are the answer. But regulations are simply legal permission to allow a polluting industry to operate, and the instructions to do so. Some regulations attempt to mitigate some harm but allow the frack industry to continue nonetheless. A ban actually *protects* us by preventing the harm in the first place.

In Michigan law, the Department of Environmental Quality (DEQ) Office of Oil, Gas and Minerals is required to "foster the development of the industry along the most favorable conditions" to maximize oil and gas production.³ With a law like that on the books since the 1930s, it's no wonder that the DEQ is a captured agency, required to work hand-in-glove with the gas industry. The state receives 5% of gross cash market value of the production of gas and 6.6% of oil.⁴ In addition, companies engaged in fracking gave more than \$5 million to state lawmakers to "ignore the dangers of fracking and embrace its expansion."⁵

The Committee to Ban Fracking in Michigan seeks to ban this practice to protect our state, our health and our planet from the devastation and suffering caused by the frack industry. Read on to learn about these harms and how we can ban fracking through the ballot initiative process.

The gas and oil industry's fairy tale

"Fracking' is not new," says the gas and oil industry and the Michigan DEQ. "We've been doing it safely for over 60 years, with no contamination or harm. We have great regulations and we enforce them all, most of the time. But we can tweak them a bit if it makes people feel better. We need fracking to give us energy independence from foreign sources. Fracking brings lots of local jobs, and natural gas is cleaner than coal. There is no proof of water problems or health issues."

Sounds great, yes? These statements are part of a great fairy tale perpetuated by the oil and gas industry worldwide, repeated by the DEQ, and frequently passed on by the media without question or research. Science and the facts tell a very different story.

3 MCL 324.61502.

4 Michigan Revenue Act, MCL 205.303.

5 Common Cause, *Deep Drilling, Deep Pockets, in Congress and Michigan*. November 10, 2011, 19.



THE MANY HARMS OF FRACKING

Water is contaminated

Vast amounts of water are required throughout the drilling and fracking process. Michigan, with more private groundwater drinking wells than any other state,⁶ is using more water per frack well than any other state. One frack well used 21 million gallons⁷ and some new applications seek 35 million gallons for each well, with several such wells on one pad. Multiplied by the thousands of new frack wells that the industry would like to place throughout the Lower Peninsula, that adds up to a lot of water. As much water would be used by just 17 new horizontal high-volume wells as all 12,000 mostly Antrim-shale wells over the past 60 years combined. Industry takes this public resource that sustains life, and intentionally poisons it with chemicals. Water used for fracking is destroyed, forever lost to the hydrologic cycle.

Given these massive amounts of water, the amount of chemicals used is also enormous. Just one well using 35 million gallons of water would require about 175,000 gallons of chemicals. Toxic chemicals are used at every stage of development to reach and release the gas. More than 900 products using over 600 chemicals have been identified including the BTEX group — benzene, toluene, ethylbenzene, and xylene — as well as lead, methanol, and 2-butoxyethanol. We are not allowed to know what some of these chemicals are, as the industry calls them “trade secrets.” Of the chemicals known to be used in fracking, 75% could affect the skin, eyes and respiratory and gastrointestinal systems, 40-50% could affect the brain and nervous system, immune and cardiovascular systems, and the kidneys, 37% could affect the endocrine system, and 25% could cause cancer and mutations.⁸



An injection well in Mayfield Township, Grand Traverse County.

Toxic wastes created

Fracking operations are highly industrial processes that create huge amounts of contaminated waste. Drilling muds and cuttings, though toxic, are solidified on site or brought to landfills.^{9 10} The water-sand-chemical mixture used for fracking that partially comes back up as “flowback” (and later as liquid waste that the gas industry calls “produced water”), is so poisonous it is stored in tanks until trucked to injection wells and put underground, supposedly “forever.” These wastes contain

all of the toxic chemicals originally added plus naturally occurring radioactive materials, heavy metals, arsenic and other harmful substances. Michigan has 1,460 Class II injection wells. With increased fracking in and out of Michigan, more injection wells will be needed to handle the ballooning frack waste burden, with wastes likely being brought here from fracking elsewhere.¹¹ Well structures — the cement and steel casing barriers between the drilled frack well or injection well and our aquifers — are known to fail at rates of about 5% right after drilling. More fail later, and *most fail eventually*. Well casing and cement failures lead to contaminated water and methane leaks.¹² In addition to the toxic frack well and injection well sites, the complexes include compressor stations and processing facilities which also discharge waste into the air, including nitrogen oxides, carbon monoxide, volatile organic compounds, particulate matter, formaldehyde, sulfur dioxide, and methane. Injection wells, and now frack wells, have been shown to cause earthquakes in Ohio.¹³ There has been an increasing number of earthquakes in several states with fracking.

Fracking worsens global warming

Natural gas (which is mostly methane), is promoted by some as a “bridge fuel” we can use instead of coal and oil before switching someday to renewable energy. Yet methane is now known to be the second largest contributor to human-caused global warming after carbon dioxide.¹⁴ It is a more potent greenhouse gas, retaining more heat in the short term, than carbon dioxide — 86 times more over 20 years and 125 times more over 10 years.¹⁵ Methane emissions occur throughout the extraction life cycle of fracking, much of it unfixable. The greenhouse gas footprint is now, and unless curtailed will remain, so large that scientists studying methane emissions conclude that fracking for natural gas is a “bridge to nowhere,” increasing global warming on a scale worse than coal and oil.^{16 17} Fracking, even “regulated” fracking, displaces the roll-out of renewables which climate scientists tell us must begin rapidly — now — in order to avoid catastrophic climate impacts.

6 Penn State Extension, *A Guide to Private Water Systems in Pennsylvania*, 2009, 8.

7 “Michigan’s 21-Million Gallon Frack Job: A National Record?” Ban Michigan Fracking, February 5, 2013. <http://banmichiganfracking.org/?p=1483>.

8 Colburn, Theo et al, “Natural Gas Operations from a Public Health Perspective,” *International Journal of Human and Ecological Risk Assessment* 17:1039-1056 (2011); doi:10.1080/10807039.2011.605662; The Endocrine Disruption Exchange. <http://endocrinedisruption.org>.

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15 Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis*, November 2013. www.ipcc.ch.

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18 Dyrzska, Larysa, “Shale Gas: Potential Health and Environmental Risk,” April 10, 2014 presentation to Committee to Ban Fracking in Michigan. www.letsbanfracking.org.

19 Seth B. Shonkoff, Jake Hays, and Madelon L. Finkel, “Environmental Health Perspectives and Public Health Dimensions of Shale and Tight Gas Development,” *Environmental Health Perspectives*, 16 Apr 2014.

THE MANY HARMS OF FRACKING

Health impacts of fracking

The frack industry harms human and animal health.¹⁸ Scientific studies are now catching up to document the nightmare people are experiencing.¹⁹ The exposure pathways are water, air and soil. Studies show high levels of toxic compounds in the air and water. Recent studies found that people living within a half mile around frack industry sites are at greater risk for cancer,²⁰ and birth defects increase within ten miles.²¹ Symptoms health professionals observe in Pennsylvania include skin rash, nausea, vomiting, cough, abdominal pain, breathing difficulties, nosebleeds, stress and nervous system problems including headache and dizziness, and eye and throat irritation.²² A jury awarded a Texas family nearly \$3 million in a landmark victory in 2014 for their illnesses suffered due to pollution caused by nearby drilling operations, believed to be the first case whereby harmed plaintiffs refused to settle with a nondisclosure agreement.²³ A compiled list of those harmed by the frack industry has now grown to 6,000 nationwide.²⁴ People are leaving their homes due to lack of drinkable water, air contamination, and ill health. Michigan is a high hydrogen sulfide (H₂S) area. When this deadly gas escapes during extraction, it endangers entire communities and workers alike.²⁵ ²⁶ People are permanently poisoned by exposure to H₂S.²⁷

Property loses value

If you are a property owner seeking income from signing a lease to drill on your land — think again. First of all, your property value goes down immediately. A spill will end any chance for organic farm certification. Many banks no longer give mortgages or loans on land that is leased for fracking.²⁸ Insurance companies are canceling homeowner policies and will not cover the damage. Whole neighborhoods lose value when anyone allows drilling. Royalties can not compensate for this loss. When water or land become contaminated, your property is likely not salable.

Fracking for overseas markets

While the industry and our leaders from the president on down tell us we have 100 years of natural gas and we are on our way to energy independence with fracked gas, the truth

is that most fracked gas is destined for shipping overseas to Europe and Asia where there is maximum profit and need. What is missing now are the pipelines, refineries and liquified natural gas terminals to move it out of the country. As soon as these are in place, more wells will come into production, export will expand and prices here at home will rise as our supplies dwindle.²⁹ Regulations are not going to change the rules of global market economics. This is not sustainable, lasting energy independence. The fossil fuel frack industry is boom-bust, leaving communities with contamination, health impacts and worse global warming.

Impacts on jobs

Most fracking jobs are precarious and short-term. Workers are rarely from Michigan. The industry uses a national or international pool of experienced workers.³⁰ They stay in “man camps” and add to social problems. Rents skyrocket, STD cases and crime increase, and demands on health and social services increase.³¹ Once temporary workers leave, the toxic infrastructure is left. Industry jobs data do not take into account the number of jobs lost in agriculture and tourism after the land and water are destroyed or jobs created in alternative energy fields if fracking is banned.



Frack well on Ogemaw County farm land.

Food and fracking don't mix

Fracking contaminates our food system.³² Farmland, now converted to industrial land use, becomes fragmented and loses productivity. Water and soil become contaminated for crops. Poisoned animals sicken and die.³³ Wastes laden with radioactive material and heavy metals are brought to the surface. Toxins and carcinogens become part of our food.

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WHAT IS THE “BAN FRACKING” BALLOT INITIATIVE?

The only way we can ban fracking is if we write the law to prohibit it. We can ban fracking and frack wastes statewide through a *ballot initiative*. **The Committee to Ban Fracking in Michigan** is a *ballot question committee* registered with the Michigan Bureau of Elections. We are non-partisan, grassroots and citizen-led. Our proposal will go on a statewide ballot for Michigan voters to decide. We collected a significant number of signatures in 2013, largely by volunteers. We will begin a new signature-gathering phase when we raise the funds to allow us to hire additional support of paid circulators, to collect all the necessary signatures to get on the 2016 ballot.

The ballot proposal will ban horizontal fracking, and prohibit wastes from horizontal fracking from being produced, stored, processed or disposed of in Michigan. It will also eliminate existing statutory language that requires the Michigan Department of Environmental Quality to “*foster the development of the [gas and oil] industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production*” of oil and gas. In its place is a requirement that DEQ construe the statute to protect human health and water. For the full ballot language, see www.letsbanfracking.org.

WHY A BALLOT INITIATIVE?

Citizen-led ballot initiatives and referenda, often called “direct democracy,” got their start during the Progressive Era, a period of social activism and political reform in the U.S. that flourished from the 1890s to the 1920s. The era was marked by reforms aimed at breaking concentrated monopoly power of corporations and trusts. Many Progressives felt that state legislatures were part of this problem, and in the pocket of the wealthy. They created the *initiative* (creating or amending laws) and *referendum* (repealing a law already enacted) as a way all voters can participate in creating laws directly.

HOW AN INITIATIVE WORKS

Statutory or *legislative initiative* is defined by section 9 of article 2 of the Michigan state constitution as the people’s power “to propose laws and to enact and reject laws.” It is invoked by filing petitions containing signatures of registered voters of at least 8% of the total votes in the last election for governor. Once enough valid signatures are collected the legislature must enact the proposal without modification or reject it within 40 session days. If the legislature rejects it or fails to act, the proposed legislation goes to a vote of the people. The governor cannot veto a law enacted this way. It becomes the new law of the land,

replacing and extinguishing any previous language to the contrary (unlike a referendum). The legislature cannot amend or repeal it, except at a subsequent session, and then only by a supermajority 3/4 vote in both the Michigan house and senate.

WHAT YOU CAN DO

Donate to the campaign to ensure that we grow our movement to get on the ballot *and win*. Your contribution goes directly to campaign activities — signature collecting and verification, educational materials, website, advertising, social media and get-out-the-vote.



Endorse and ask a local organization to endorse.

Spread the word by talking with people, and helping with visibility and tabling events.

Help fundraise by getting involved in official committee fundraisers.

Collect signatures when we begin signature-gathering.

Yes, I'd like to contribute!

*Name _____

*Street address _____

*City _____ *State ____ *Zip _____

*Occupation _____

*Employer name _____

*Employer address _____

Phone: _____

Email: _____

Amount enclosed: _____

You may make a donation of \$20 or under in cash or by check. Donations over \$20 must be made by check, or online.

Contributions are *not* tax-deductible.

* Required by campaign finance law.

You must be a US Citizen to contribute.

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