

Wilcox, Rhonda (MDA)

From: Lynn Henning <lynnh@sraproject.org>
Sent: Wednesday, January 22, 2014 3:28 PM
To: Wilcox, Rhonda (MDA)
Subject: 2014 Draft GAAMPs
Attachments: LHenning MI draft 2014 GAAMPs comments - January 22.pdf; Bakerlad water samples.pdf

Thank you for the opportunity to comment on the 2014 Draft GAAMPs.
If you have any questions please contact me.

Lynn

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January 22, 2014

Via email: WilcoxR2@michigan.gov

Michigan Department of Agriculture & Rural Development

Environmental Stewardship Division

P.O. Box 30017

Lansing, MI 48909

RE: Public Input Comments on the 2014 Draft Generally Accepted Agricultural and Management Practices (GAAMPs)

GAAMPs Task Force Committee Chairperson and Members:

Thank you for the opportunity to comment on the above referenced matter. As a preliminary note, I assert that the Michigan Right to Farm Law is unconstitutional. It is a taking of property, life, health, and environment without just compensation.

According to Michigan's Right to Farm Act Brochure:

The Michigan Right to Farm Act, P.A. 93, was enacted in 1981 to provide *farmers* with nuisance protection. This state law authorizes the Michigan Commission of Agriculture and Rural Development to develop and adopt Generally Accepted Agricultural and Management Practices (GAAMPs) *for farms and farm operations in Michigan*. These farm management practices are scientifically based and updated annually to utilize current technology promoting sound environmental stewardship on Michigan farms.

By utilizing GAAMPs, farmers and Michigan residents benefit: through environmental protection of natural resources; sound management of agricultural inputs; and sustaining a strong and stable agricultural industry.

While adherence to the GAAMPs does not act as a complete barrier to complaints or lawsuits, it does provide an umbrella of protection from nuisance litigation. In addition to conformance to the GAAMPs, farmers also need to comply with all state and federal environmental and agricultural laws (emphasis added).

While this says that farmers need to comply with all state and federal environmental and agricultural laws, nowhere does it state that GAAMPS must comply with the law. This gives farmers in Michigan a false sense of security that if they comply with GAAMPS, they are complying with state and federal law. Under the draft 2014 GAAMPS program, practices that violate state and federal law are made to be voluntary.

Further, while it is said that the Right to Farm Act works for everyone, it doesn't. urban agriculture is excluded. In addition, and most importantly, the Act and its corresponding GAAMPS program essentially protect polluters at the expense of Michigan rural residents. New practices are not developed to address concerns of the neighbors, but rather are designed to protect commercial agriculture operations or concentrated animal feeding operations (CAFOs).

The comments that follow address these issues.

MANURE GAAMPS

As proposed, solids stacking in the fields are a direct violation of Michigan's National Discharge Elimination System (NPDES) permit program. For example, the production area is the portion of the CAFO that includes all areas used for animal product production activities. This includes, but is not limited to: the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes "open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways (not within pasture areas), and stables. The manure storage area includes lagoons, runoff ponds, storage sheds, *stockpiles*, under-house or pit storages, liquid impoundments, static piles, and composting piles" (emphasis added). According to state law, all production area waste must be contained to meet NPDES permit requirements.

Further, under state's environmental regulations, CAFOs must address the transfer of waste via manifests. The manure GAAMPS do not appropriately address waste manifests in accordance with state law. Nor do they address the manifest of waste back to the owner or operator under a different name.

The manure GAAMPS also do not address: shared properties for waste application; CAFOs that operate under multiple facility names, or waste taken

from other operations or outside sources. These are major loopholes that will lead to violations of state and federal law for manure management.

In addition, manure is not recommended on food for human consumption as stated by the Nebraska Extension Service for irrigation. The draft GAAMPs do not address this and, as such, pose a risk to public health and safety.

SITE SELECTION GAAMPs

The purpose of site selection GAAMPs is to focus specifically on water quality protection and odor control. If this were truly the case, there would be few sites in Michigan adequate for large-scale industrial livestock production facilities. Under each proposed category in the GAAMPs, impacts to surrounding populations are collateral damage. Why would a residential zone be categorized any differently than people living within a ½ mile radius?

IRRIGATION GAAMPs

Sub irrigation should never be allowed with the use of animal waste, chemicals or fertigation. Sub irrigation has already caused groundwater and surface water contamination with E-coli 0'157 at a CAFO (see attached).

Furthermore, there is no limit for how many irrigators can be placed over an aquifer. There is also no limit to withdrawal of groundwater from an aquifer for irrigation. In addition, there is no mention of irrigators being placed directly over open waterways or directly over county drains while irrigating waste. As such, the irrigation GAAMPs are wholly inadequate to protect public health and impacts to surface and ground waters.

PUBLIC HEALTH CONSIDERATIONS

Overall, there is NO consideration of the public health impacts caused by CAFO facilities or their waste application practices in the draft GAAMPs. This is unacceptable.

As a family farmer, I can speak to the fact that good farmers don't need the Right to Farm Act or the GAAMPs. The rural code is "you don't harm your neighbor and he doesn't harm you." The Right to Farm Act creates conflicts in rural communities by placing farmers rights above the rights of the residents and property owners. It also pegs farmers against CAFOs. The Act and the GAAMP

program flaunts practices as “industry standards” and being “based on science,” that can actually harm people.

In August and October of 2013, my father-in-law, Gerald Henning, a lifetime family farmer, was taken to the emergency room due to breathing problems caused by animal waste. The second time he had breathing problems and had to go to the emergency room, he was going through radiation treatments. His immune system was compromised. The waste application being done by a nearby CAFO was so extreme that hydrogen sulfide was in his home. He could not breath. Gerald Henning died on October 15, 2013.

The first picture provided below is the application in August 9th with Gerald Henning’s House in the background. This application got 1.0 ppm of hydrogen sulfide meter.



The picture below was taken inside Gerald Henning's home on the morning October 8, 2013. The picture is from his kitchen. 1.2 PPM of hydrogen sulfide with oxygen at 18.6, should be 20.9 for oxygen.



I refer the Chairperson and the Committee to some examples of sound science.

Bioterrorism Agents

Bacteria, viruses and toxins that can be emitted from CAFOs can be compared to bioterrorism agents. Please see information on bioterrorism from the Southern Illinois University (SIU) School of Medicine, at:

<http://www.siumed.edu/medicine/id/bioterrorism.htm#infec>.

Category B - Bioterrism Agents

This category (47) contains the *second highest priority agents* because they:

a. are moderately easy to disseminate

b. cause moderate morbidity and low mortality

c. require specific enhancement of CDC's diagnostic capacity and enhanced disease surveillance.

Table 3 - Category B Bioterrorism Agents

Bacteria	Viruses	Toxins
Coxiella burnetti (Q fever)	Alpha viruses	Ricin toxin (Ricinus communis) Epsilon toxin (Clostridium perfringens) Enterotoxin B (Staphylococcus aureus) T2 - Mycotoxins*
Brucella species (Brucellosis) Burkholderia mallei	Venezuelan encephalomyelitis	
(Glanders) Burkholderia pseudomallei	Eastern equine encephalomyelitis	
(Melioidosis) Rickettsia promazekii	Western equine encephalomyelitis	
Chlamydia psittaci (Psittacosis)		*Not listed under CDC Category B agents

Pathogens

Both manure and animal carcasses contain pathogens (disease-causing organisms), which can impact human health, other livestock, aquatic life, and wildlife when introduced into the environment. Several pathogenic organisms found in manure can infect humans. Food or water borne pathogens include, Salmonella species, Shigella dysenteria, Escherichia coli 0157:H7, Vibrio cholera and Cryptosporidium parvuus.

See USEPA's information on pathogens, at:
<http://www.epa.gov/oecaagct/ag101/impactpathogens.html>.

Table 1. Some Diseases and Parasites Transmittable to Humans from Animal Manure

Disease	Responsible Organism	Symptoms
Bacteria		
Anthrax	Bacillus anthracis	Skin sores, fever, chills, lethargy, headache, nausea, vomiting, shortness of breath, cough, nose/throat congestion, pneumonia, joint stiffness, joint pain
Brucellosis	Brucella abortus, Brucella melitensis, Brucella suis	Weakness, lethargy, fever, chills, sweating, headache
Colibacillosis	Escherichia coli (some serotypes)	Diarrhea, abdominal gas
Coliform mastitis-metritis	Escherichia coli (some serotypes)	Diarrhea, abdominal gas
Erysipelas	Erysipelothrix rhusiopathiae	Skin inflammation, rash, facial swelling, fever, chills, sweating, joint stiffness, muscle aches, headache, nausea, vomiting
Leptospirosis	Leptospira Pomona	Abdominal pain, muscle pain, vomiting, fever
Listeriosis	Listeria monocytogenes	Fever, fatigue, nausea, vomiting, diarrhea
Salmonellosis	Salmonella species	Abdominal pain, diarrhea, nausea, chills, fever, headache
Tetanus	Clostridium tetani	Violent muscle

		spasms, "lockjaw" spasms of jaw muscles, difficulty breathing
Tuberculosis	Mycobacterium tuberculosis, Mycobacterium avium	Cough, fatigue, fever, pain in chest, back, and/or kidneys
Rickettsia		
Q fever	Coxiella burneti	Fever, headache, muscle pains, joint pain, dry cough, chest pain, abdominal pain, jaundice
Viruses		
Foot and Mouth	Virus	Rash, sore throat, fever
Hog Cholera	Virus	
New Castle	Virus	
Psittacosis	Virus	Pneumonia
Fungi		
Coccidioidycosis	Coccidioides immitus	Cough, chest pain, fever, chills, sweating, headache, muscle stiffness, joint stiffness, rash wheezing
Histoplasmosis	Histoplasma capsulatum	Fever, chills, muscle ache, muscle stiffness, cough, rash, joint pain, joint stiffness
Ringworm	Various microsporium and trichophyton	Itching, rash
Protozoa		
Balantidiasis	Balatidium coli	
Coccidiosis	Eimeria species	Diarrhea, abdominal gas

Cryptosporidiosis	Cryptosporidium species	Watery diarrhea, dehydration, weakness, abdominal cramping
Giardiasis	Giardia lamblia	Diarrhea, abdominal pain, abdominal gas, nausea, vomiting, headache, fever
Toxoplasmosis	Toxoplasma species	Headache, lethargy, seizures, reduced cognitive function
Parasites/Metazoa		
Ascariasis	Ascaris lumbricoides	Worms in stool or vomit, fever, cough, abdominal pain, bloody sputum, wheezing, skin rash, shortness of breath
Sarcocystiasis	Sarcosystis species	Fever, diarrhea, abdominal pain

<http://www.epa.gov/oecaagct/ag101/impactpathogens.html>

Appendix A (draft animal feed attached)

Chemical Compounds

The following table lists 168 chemical compounds (and their synonyms) that have been identified in manure and in the air around various livestock operations. This list of compounds is an adaptation of the information found in "A Review of the Control of Odour Nuisance from Livestock Buildings: Part 3, Properties of the Odorous Substances which have been identified in livestock wastes or in the air about them," by D. H. O' Neill and V. R. Phillips (Journal of Agricultural Engineering Research, 1992, 53, 23-50). This same information is also presented in the "Generic Environmental Impact Statement on Animal Agriculture: A Summary of the Literature Related to Air Quality and Odor," prepared for the Minnesota Environmental Quality Board. The data comes entirely from a review

of available literature. In addition to the chemical compound name(s), a column has been added (EPA Classification) that identifies the substances that have been classified by EPA as being a hazardous air pollutant (HAP), volatile organic compound (VOC), or a criteria air pollutant (criteria). In a few cases, the compound does not fall into any of the above categories (i.e., acetone). In these particular instances, the classification field is left blank.

DRAFT A-1 August 15, 2001

Appendix A.

Listing of Chemical Substances Identified In and Around Livestock Manure (Adapted from O'Neill and Phillips 1992)

	Compound (names)	EPA Classification
Carboxylic Acids		
1	formic acid methanoic acid	VOC
2	acetic acid ethanoic acid	VOC
3	propionic acid propanoic acid	VOC
4	n-butyric acid butanoic acid	VOC
5	i-butyric acid 2-methylpropanoic acid	VOC
6	n-valeric acid pentanoic acid	VOC
7	i-valeric acid 3-methylbutanoic acid	VOC
8	2-methylbutanoic acid	VOC
9	2-methyl-2-butenic acid (angelic acid)	VOC
10	n-caproic acid hexanoic acid	VOC

11	i-caproic acid 4-methylpentanoic acid	VOC
12	2-methylpentanoic acid	VOC
13	oenanthic acid heptanoic acid	VOC
14	caprylic acid octanoic acid	VOC
15	pelargonic acid nonanoic acid	VOC
16	capric acid decanoic acid	VOC
17	hendecanoic acid undecanoic acid	VOC

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Appendix A.

Listing of Chemical Substances Identified In and Around Livestock Manure (Adapted from O'Neill and Phillips 1992) (Continued)

	Compound (names)	EPA Classification
18	lauric acid dodecanoic acid	VOC
19	tredecanoic acid	VOC
20	myristic acid tetradecanoic acid	VOC
21	benzoic acid benzenecarboxylic acid	VOC
22	penylacetic acid phenylethanoic acid -toluic acid <i>a</i>	VOC
23	3-phenylpropionic acid 3-phenylpropanoic acid hydrocinnamic acid	VOC

Alcohols		
24	methanol methylalcohol	HAP, VOC
25	ethanol ethyl alcohol	VOC
26	n-propyl alcohol l-propanol	VOC
27	i-propyl alcohol 2-propanol	VOC
28	n-butyl alcohol l-butanol	VOC
29	sec-butyl alcohol 2-butanol	VOC
30	isobutyl alcohol 2-methyl-l-propanol	VOC
31	pentanol n-amyl alcohol	VOC
32	i-pentanol 3-methylbutanol iso-amyl alcohol	VOC
33	l-hexanol n-hexyl alcohol	VOC

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
34	hex-3-ene-1-ol	VOC
35	2-methyl-2-pentanol demethyl-n-propyl-carbinol	VOC
36	l-heptanol	VOC
37	iso-heptanol	VOC
38	3-octanol amylethyl alcohol	VOC
39	2-ethylhexanol	VOC

40	2-methoxyethanol methyl cellosolve methyl glycol	VOC
41	2-ethoxy-1-propanol	VOC
42	2,3-butanediol	VOC
43	benzyl alcohol hydroxytoluene	VOC
44	-methylbenzyl alcohol α	VOC
45	4-methylcyclohexanol	VOC
46	2-penylethanol	VOC
Phenolics		
47	phenol carbolic acid benzenol hydroxybenzene	HAP, VOC
48	p-cresol 4-hydroxytoluene 4-methylphenol	HAP, VOC
49	m-cresol 3 hydroxytoluene 3-methylphenol	HAP, VOC
50	o-cresol 2-hydroxytoluene 3-mthylphenol	HAP, VOC

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Appendix A.

Listing of Chemical Substances Identified In and Around Livestock Manure (Adapted from O'Neill and Phillips 1992) (Continued)

	Compound (names)	EPA Classification
51	p-methoxyphenol 4-methoxyphenol hydroquinone mono-methylether	VOC
52	o-methoxyphenol 2-methoxyphenol guaiacol	VOC
53	p-ethylphenol 4-ethylphenol 1-ethyl-4-hydroxybenzene	VOC

54	m-ethylphenol 3-ethylphenol 1-ethyl-3-hydroxybenzene	VOC
55	o-ethylphenol 2-ethylphenol 1-ethyl-2-hydroxybenzene phlorol	VOC
56	2,6-dimethyl phenol 1,3-diethyl 2-hydroxybenzene	VOC
57	3,4-dimethylphenol 1,3-dimethyl- 5-hydroxybenzene	VOC
58	3-hydroxy-2-methyl-4-pyrone lanxinic acid maltol	VOC
Aldehydes		
59	formaldehyde methanal	HAP, VOC
60	acetaldehyde ethanal	HAP, VOC
61	propionaldehyde propanal	HAP, VOC
62	acrolein 2-propenal acrylaldehyde	HAP, VOC
63	butyraldehyde butanal	VOC

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Appendix A.

Listing of Chemical Substances Identified In and Around Livestock Manure (Adapted from O'Neill and Phillips 1992) (Continued)

	Compound (names)	EPA Classification
64	iso-butyraldehyde 2-methyl propanal	VOC
65	crotonaldehyde 2-butenal	VOC
66	valeraldehyde pentanal	VOC
67	iso-valeraldehyde 3- methylbutanal	VOC

68	2-pentenal	VOC
69	caproaldehyde hexanal	VOC
70	2-hexenal	VOC
71	oenanthaldehyde heptanal	VOC
72	2-heptenal	VOC
73	2,3-heptadienal	VOC
74	caprylaldehyde octanal	VOC
75	pelargonaldehyde nonanal	VOC
76	2-nonenal	VOC
77	2,4-nonadienal	VOC
78	capraldehyde decanal decylaldehyde	VOC
79	2,4-decadienal	VOC
80	benzaldehyde benzenecarbonal	VOC
81	acetone dimethylketone (2-)propanone	

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
82	diacetyl dimethylglyoxal 2,3-butanedione	VOC
83	(2-)butanone methylethylketone	HAP, VOC

84	acetoin 3-hydroxy-2-butanone	VOC
85	3-pentanone diethylketone propione	VOC
86	cyclopentanone adipic ketone	VOC
87	2-methyl cyclopentanone	VOC
88	2-octanone hexylmethylketone	VOC
89	amylvinylketone 1-octene-3-one	VOC
90	acetophenone acetylbenzene methylphenylketone	HAP, VOC
Esters		
91	methylformate formic acid methyl ester	VOC
92	methylacetate acetic acid methyl ester	VOC
93	ethylformate formic acid ethyl ester	VOC
94	ethyl acetate acetic acid ethyl ester	VOC
95	propylacetate acetic acid propyl ester	VOC

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
96	i-propylacetate acetic acid isopropyl ester	VOC
97	butylacetate acetic acid butyl ester	VOC
98	i-butylacetate acetic acid isobutyl ester	VOC
99	i-propylpropionate propanoic acid iso-propyl ester	VOC

Nitrogen heterocycles		
100	indole l-benzopyrrole	VOC
101	skatole 3-methylindole	VOC
102	pyridine azine	VOC
103	3-aminopyridine	VOC
104	(2)-methylpyrazine	VOC
105	methylpyrazine	VOC
106	trimethylpyrazine	VOC
107	tetramethylpyrazine	VOC
Amines		
108	methylamine aminomethane	VOC
109	ethylamine aminoethane	VOC
110	n-propylamine aminopropane	VOC
111	i-propylamine amino iso-propane	VOC

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
112	pentylamine 1-aminopentane amylamine	VOC
113	trimethylamine	VOC

114	triethylamine	HAP, VOC
Sulphides		
115	carbon disulphide	HAP, VOC
116	carbonylsulphide carbon oxysulphide	HAP, VOC
117	dimethylsulphide methylthiomethane	VOC
118	diethylsulphide ethylthioethane	VOC
119	dimethyldisulphide meethydithiomethane	VOC
120	dimethyltrisulphide methylthiomethane 2,3,4 - trithiapentane	VOC
121	diethyldisulphide ethyldithioethane	VOC
122	dipropyldisulphide propyldithiopropane	VOC
123	methylpropyldisulphide methylthiopropane	VOC
124	propylprop-1-enyl disulphide	VOC
125	diphenylsulphide phenylthiobenzene	VOC
126	3,5-dimethyl-1,2,4- trithiolane	VOC
127	3-methyl-5-propyl-1,2,4- trithiolane	VOC
128	3,6-dimethyltetra-thiane	VOC
129	2,6-dimethylthi- 3-inc-carbonyldehyde	VOC

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
Thiols (mercaptans)		
130	methanethiol methyl mercaptan	VOC
131	ethanethiol ethylmercaptan	VOC
132	propanethiol n-propylmercaptan	VOC
133	2-propanethiol isopropylmercaptan	VOC
134	2-propene-1-thiol allylmercaptan	VOC
135	butanethiol n-butylmercaptan	VOC
136	2-butene-1-thiol crotylmercaptan	VOC
137	benzenethiol thiophenol	VOC
138	-toluenethiol benzylmercaptan α	VOC
Unclassified		
142	sulphur dioxide	Criteria
143	methane	
144	pentane	VOC
145	2-methylpentane	VOC
146	hexane	HAP, VOC

147	hexene	VOC
148	heptane	VOC
149	octane	VOC
150	octene	VOC
151	undecene hendecene	VOC

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Appendix A.

**Listing of Chemical Substances Identified In and Around Livestock Manure
(Adapted from O'Neill and Phillips 1992) (Continued)**

	Compound (names)	EPA Classification
152	dodecane	VOC
153	benzene	HAP, VOC
154	toluene	HAP, VOC
155	xylene dimethylbenzene (isomer not specified)	HAP, VOC
156	indane hydrindene	VOC
157	naphthalene	HAP, VOC
158	methylnaphthalene	VOC
159	chloroform trichloromethane	HAP, VOC
160	tetrachloroethane perchloroethylene	VOC
161	hydrazine	HAP, VOC
162	2-methylfuran sylvan	VOC
163	2-pentylfuran	VOC

164	2-methylthiophene 2-methylthiofuran	VOC
165	2,4-dimethylthiophene 2,4-thioxene	VOC
166	diethylether ether ethoxyethane	VOC
167	limonene citrene carvene	VOC
168	ocimene	VOC

In summary, the GAAMPs Task Force should consider sound science in evaluating the draft 2014 GAAMPs. Livestock waste emissions can be compared to bioterrorism agents and contain pathogens and chemical compounds that can have serious negative impacts to the surrounding environment and the public health of rural residents.

CONCLUSION

The Right to Farm Act is unconstitutional and is a taking of property, life, health, and environment. The corresponding GAAMPs program and the draft 2014 GAAMPs perpetuate this problem.

While it is said that the Right to Farm Act works for everyone, it clearly doesn't. Provisions of the draft GAAMPs do not comply with state environmental laws and there is no consideration of sound science as it relates to the impacts of livestock waste to the public health of rural residents. In essence, the GAAMPs do not address concerns of the neighbors, but rather are designed to protect CAFOs. I urge the Task Force to address these issues in the draft GAAMPs in a meaningful way.

Thank you for your consideration.

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Fecal-Indicator Bacteria and *Escherichia coli* Pathogen Data Collected Near a Novel Sub-Irrigation Water-Treatment System in Lenawee County, Michigan, June–November 2007

By Joseph W. Duris and Stephanie Beeler

In cooperation with Lenawee County Conservation District

Open File Report 2008–1025

**U.S. Department of the Interior
U.S. Geological Survey**

U.S. Department of the Interior
DIRK KEMPTHORNE, Secretary

U.S. Geological Survey
Mark D. Myers, Director

U.S. Geological Survey, Reston, Virginia 2008

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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	2.54	centimeter (cm)
foot (ft)	0.3048	meter (m)
meter (m)	3.281	foot (ft)
yard (yd)	0.9144	meter (m)
Volume		
gallon (gal)	3.785	liter (L)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F}=(1.8\times^{\circ}\text{C})+32$$

Small sample volumes are reported in milliliters (mL) and microliters (μL); very small masses are given in nanograms (ng).

Bacteria concentrations are given in colony-forming units per 100 milliliters (CFU/100 mL).

Fecal-Indicator Bacteria and *Escherichia coli* Pathogen Data Collected Near a Novel Sub-Irrigation Water-Treatment System in Lenawee County, Michigan, June–November 2007

By Joseph W. Duris and Stephanie Beeler

Abstract

The U.S. Geological Survey, in cooperation with the Lenawee County Conservation District in Lenawee County, Mich., conducted a sampling effort over a single growing season (June to November 2007) to evaluate the microbiological water quality around a novel livestock reservoir wetland sub-irrigation system. Samples were collected and analyzed for fecal coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and six genes from pathogenic strains of *E. coli*.

A total of 73 water-quality samples were collected on nine occasions from June to November 2007. These samples were collected within the surface water, shallow ground water, and the manure-treatment system near Bakerlads Farm near Clayton in Lenawee County, Mich. Fecal coliform bacteria concentrations ranged from 10 to 1.26 million colony forming units per 100 milliliters (CFU/100 mL). *E. coli* bacteria concentrations ranged from 8 to 540,000 CFU/100 mL. Data from the *E. coli* pathogen analysis showed that 73 percent of samples contained the *eaeA* gene, 1 percent of samples contained the *stx2* gene, 37 percent of samples contained the *stx1* gene, 21 percent of samples contained the *rfbO157* gene, and 64 percent of samples contained the LTIIIa gene.

Introduction

The management of animal wastes on dairy farms is commonly driven by the need of farmers to effectively manage nutrient content in soils where crops are grown, as well as to control and manage manure in a way that avoids negative effects on local surface water and ground water. Typically, the management of manure in and around a farm is locally controlled by use of comprehensive nutrient-management plans that define how manure will be handled on the farm under various conditions. To meet the guidelines of these management practices, the Bakerlads Farm, working with the U.S. Department of Agriculture and the Lenawee County Conservation District, in 2005 installed novel manure-management system called a Livestock Reservoir Wetland Sub-Irrigation System (LRWSIS) on the farmstead, which is near Clayton, Mich (fig. 1; all figures and tables are at back of report).

The U.S. Geological Survey (USGS), in cooperation with the Lenawee County Conservation District (LCCD) in Lenawee County, Mich., sampled nine sites (surface water and ground water) over a single growing season, from June to November 2007. The purpose of this study was to evaluate the microbiological water quality around the LRWSIS. By studying the populations of fecal coliform and *E. coli* bacteria and by characterizing the types of *E. coli* pathogens and other bacterial markers in manure sources, we can assess how manure-management practices may contribute to indicator and pathogen loading in environmental waters. This could lead to a better understanding of how and why bacterial indicators and pathogens might be found in other environmental settings affected by agriculturally influenced waters. In addition, this work builds on a growing body of work by the USGS Michigan Water Science Center related to understanding how manure management affects the transport of fecal indicator and pathogenic bacteria. Samples were collected and analyzed for fecal coliform bacteria, *Escherichia coli* (*E. coli*), and six genes from pathogenic strains of *E. coli*, including *E. coli* O157:H7. This report summarizes the results of this sampling.

Methods

Site Information

The LRWSIS directs dairy barn wash water and runoff from the entire facility into a primary settling reservoir. Once settled, the liquid waste is then transferred into an 80,000 gal constructed wetland via a 3-in. subsurface PVC pipe that bridges a small unnamed tributary to the South Branch of the River Raisin. The liquid waste from the influent pond of the constructed wetland is allowed to move via subsurface flow through a packed layer of sand and pea gravel, planted with wetland vegetation, into the subsurface irrigation holding pond. This water is then pumped directly into a closed subsurface tile irrigation system below a planted cornfield, where it supplies water and nutrients to the crop that is planted above.

Samples for this study were collected from nine locations in and around the Bakerlads Farm (table 1 and fig. 1). For flowing water, the tributary to the South Branch of the River Raisin was sampled at three locations: upstream from the sub-irrigated field and the LRWSIS, downstream from the sub-irrigated field, and downstream from the LRWSIS. For ground water, samples were collected from two piezometers within the cropped area of the sub-irrigated field and one piezometer 10 m from the bank of the tributary to the South Branch of the River Raisin. For ponded water, samples were collected from the primary settling pond, the influent pond of the wetland system, and the sub-irrigation holding pond of the wetland system to evaluate potential inputs to the ambient water. Samples were collected on nine dates over the 2007 growing season, from June 25 through November 27, 2007 (table 2).

Sample Collection

Samples were collected by the LCCD staff using standard USGS sampling procedures documented by the USGS National Field Manual (Myers, 2003). Each sample was evaluated for fecal coliform bacteria and *E. coli* and for six genes from pathogenic *E. coli*.

Bacteriological Indicator Organisms

Samples were examined for the presence of fecal-indicator bacteria by means of standard membrane filtration and serial dilution methods as indicated in Britton and Greeson (1989), whereas *E. coli* analysis followed protocols of the American Public Health Association and others (1998), method 9222D/9222G. Fecal coliform bacteria from the membrane filter with the most growth for each site and date were collected and suspended in 1 mL of phosphate buffered saline (PBS) with a final concentration of 15 percent glycerol. This fecal coliform stock (FC) was used for all subsequent analysis for pathogenic *E. coli*.

E. coli Gene Analysis

The FC stocks were analyzed by use of three polymerase chain reaction (PCR) methods. Deoxyribonucleic acid (DNA) was extracted from one-tenth of the volume of the FC stock, using alkaline polyethylene glycol (APEG) DNA extraction (Chomczynski and Rymaszewski, 2006). A volume of 100 μ L of FC stock was transferred to a volume of 1,000 μ L of APEG reagent and incubated at 55°C for 30 minutes, at which point it was stored at 4°C until PCR analysis for *E. coli* pathogen genes.

A volume of 1 μ L of DNA representing 1–100 ng of DNA was used to conduct all PCR analysis. Samples were analyzed for the gene responsible for the O157 type (*rfbO157*) as indicated by Osek (2003). The gene targeted by this assay is the gene responsible for the production of the specific antigen found on the surface of an *E. coli* O157 cell.

The samples were also analyzed for the pathogenic *E. coli* toxin genes *eaeA*, *stx2*, and *stx1* (Fagan and others, 1999; Sabat and others, 2000). The genes targeted by this assay are those required to confirm the presence of enterohemorrhagic *E. coli* in clinical samples (Nataro and Kaper, 1998; Fagan and others 1999). The method was modified to include analysis for a gene common to all *E. coli*, both pathogenic and nonpathogenic, which was used to confirm the presence of *E. coli* (Duris and others, 2003; Fogarty and others, 2005). The LTIIa gene, carried by some pathogenic *E. coli* strains common to bovine sources, was analyzed according to Khatib and others (2002) and Chern and others (2004). A summary of all genes and their common functions and associations can be found in table 3. All gene assays followed standard protocols (U.S. Environmental Protection Agency, 2004). All methods included positive controls and method blanks.

Results

Water-quality samples were collected on nine occasions from June to November 2007. A total of 73 water samples were collected within the surface water, shallow ground water, and manure-treatment system near Bakerlads Farm, in Lenawee County, Mich. Fecal coliform bacteria concentrations ranged from 10 to 1.26 million CFU/100 mL. *E. coli* bacteria concentrations ranged from 8 to 540,000 CFU/100 mL. Data from the *E. coli* pathogen analysis showed that 73 percent of samples contained the *eaeA* gene, 1 percent of samples contained the *stx2* gene, 37 percent of samples contained the *stx1* gene, 21 percent of samples contained the *rfbO157* gene, and 64 percent of samples contained the LTIIa gene. The EC gene that is common to all *E. coli* was present in 97 percent of samples. The data from the fecal-indicator bacteria testing at each site are presented in table 4 and figures 2–10. Data from the *E. coli* pathogen analysis are presented in table 4. Those samples that had countable *E. coli* but no detectable EC gene were considered not amplifiable by PCR and are noted in table 4.

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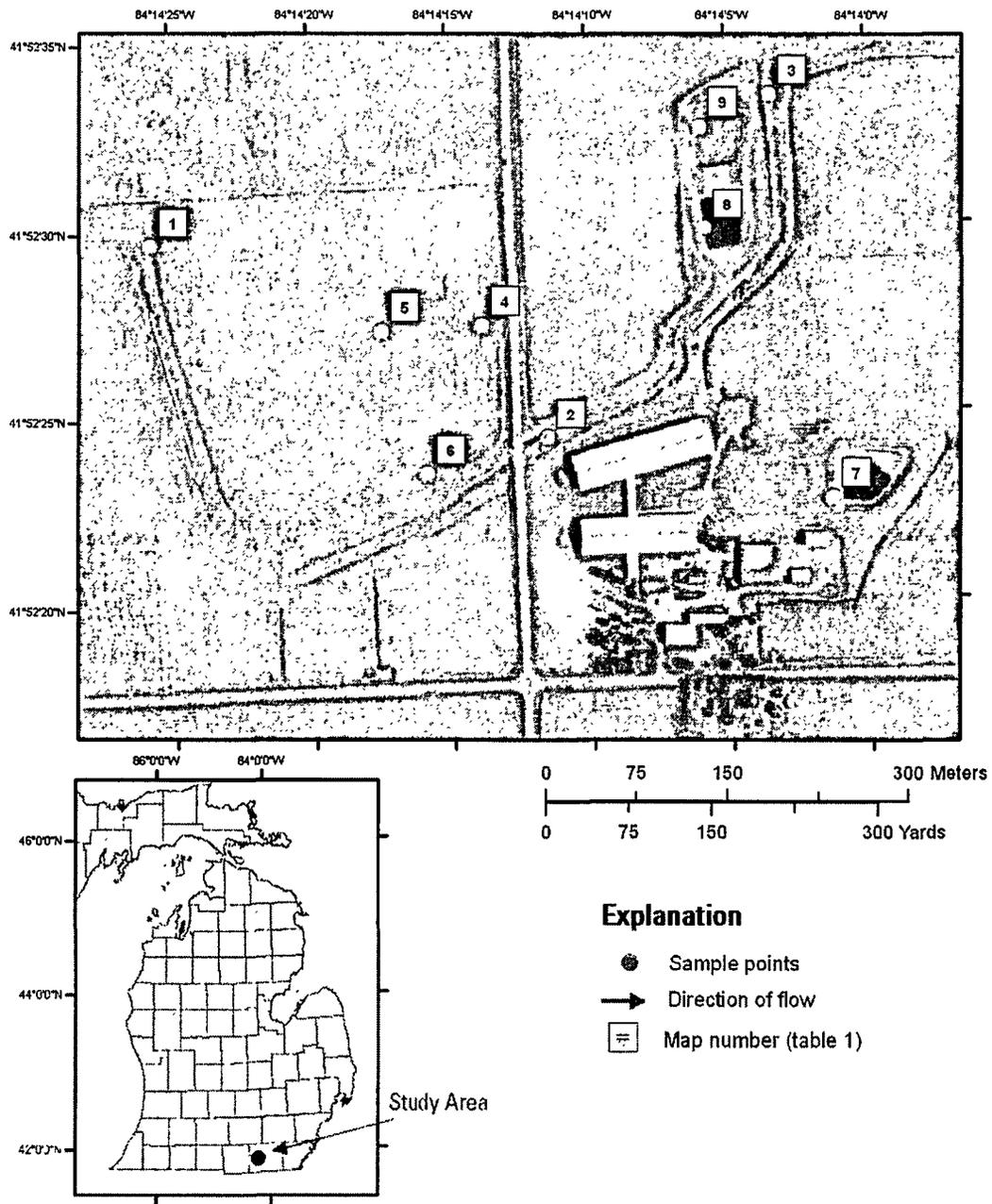


Figure 1. Sampling locations for fecal indicator bacteria and *E. coli* pathogen study, Lenawee County, Mich., 2007.

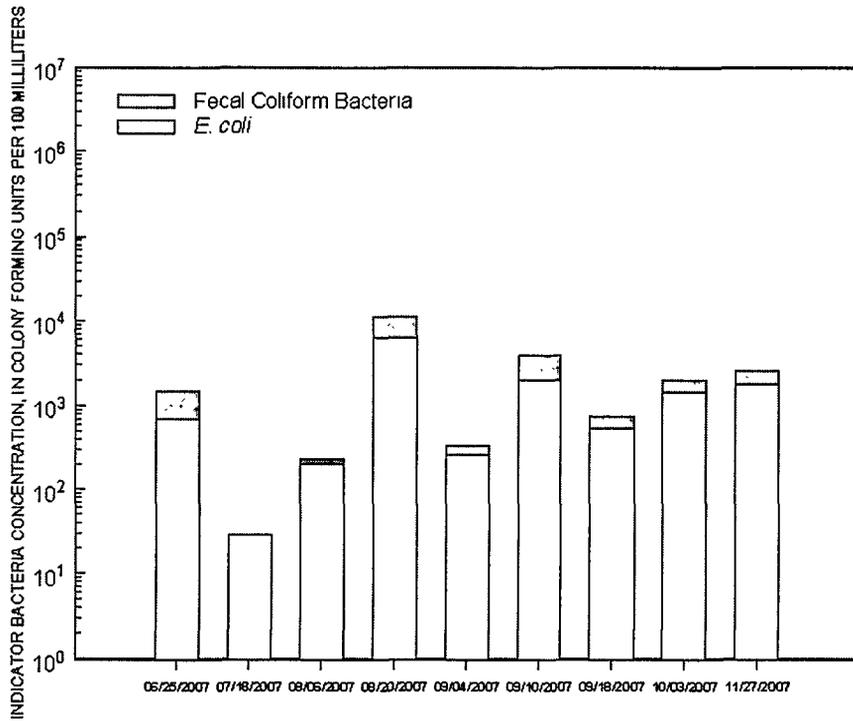


Figure 2. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415233084140309 (D1), in Lenawee County, Mich., 2007.

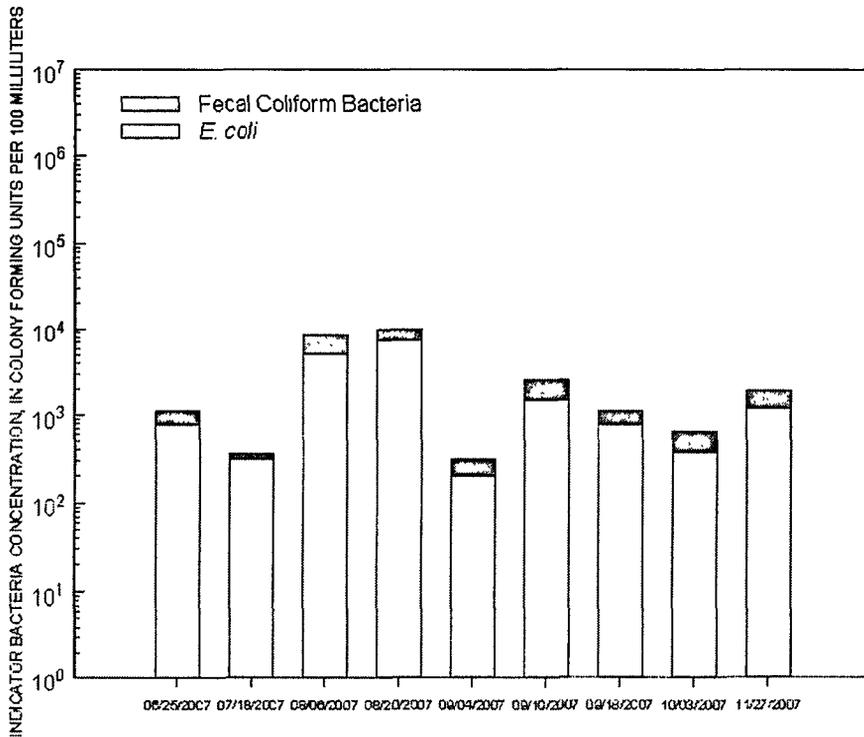


Figure 3. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415224084141108 (D2), in Lenawee County, Mich., 2007.

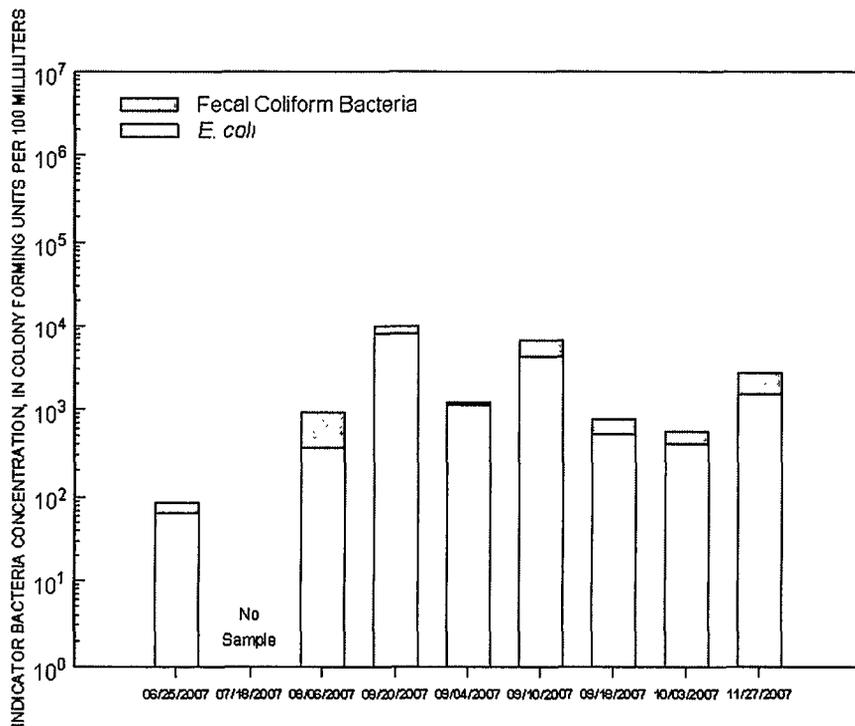


Figure 4. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415230084142607 (D4), in Lenawee County, Mich., 2007.

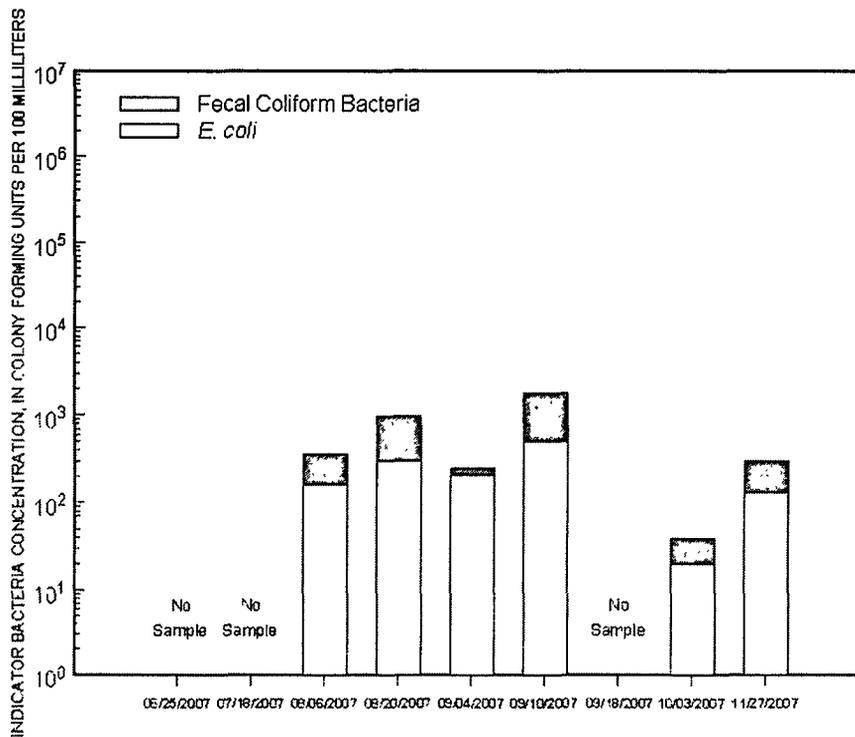


Figure 5. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415224084141604 (W1), in Lenawee County, Mich., 2007.

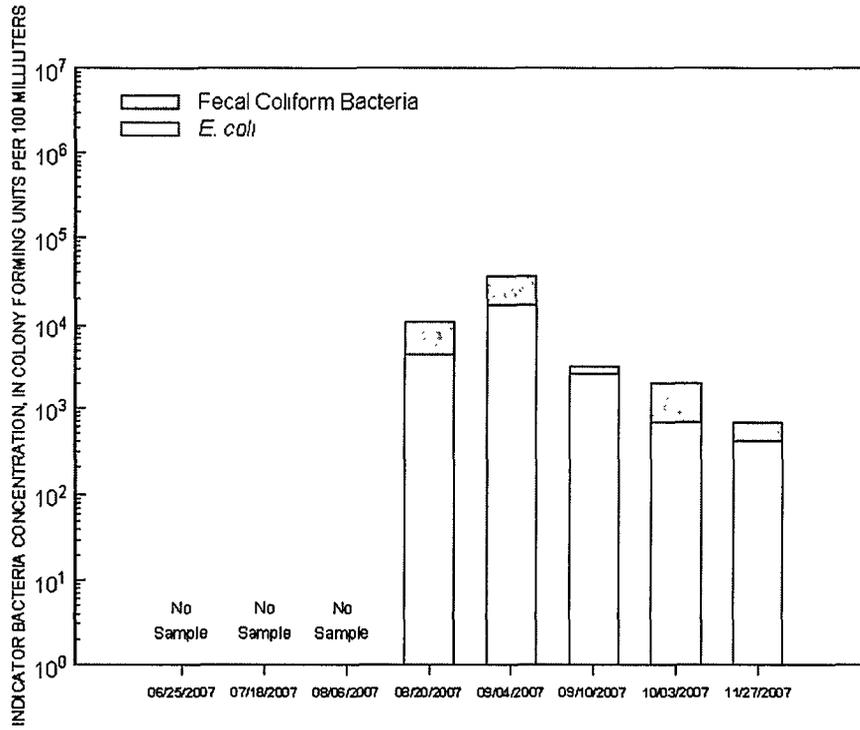


Figure 6. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415227084141405 (W2), in Lenawee County, Mich., 2007.

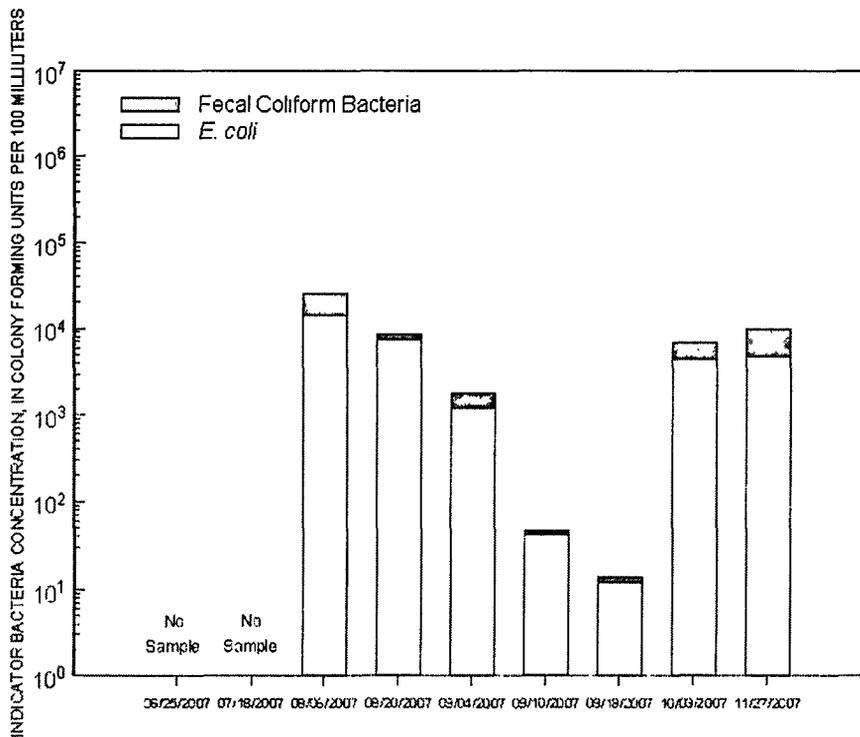


Figure 7. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415227084141806 (W3), in Lenawee County, Mich., 2007.

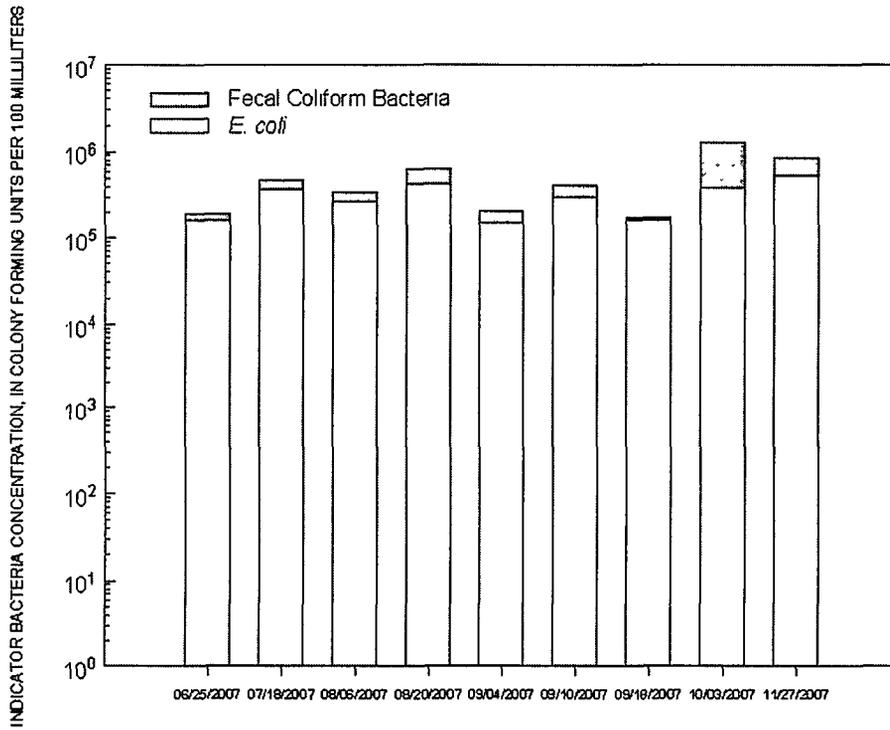


Figure 8. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415223084140101 (P2), in Lenawee County, Mich., 2007.

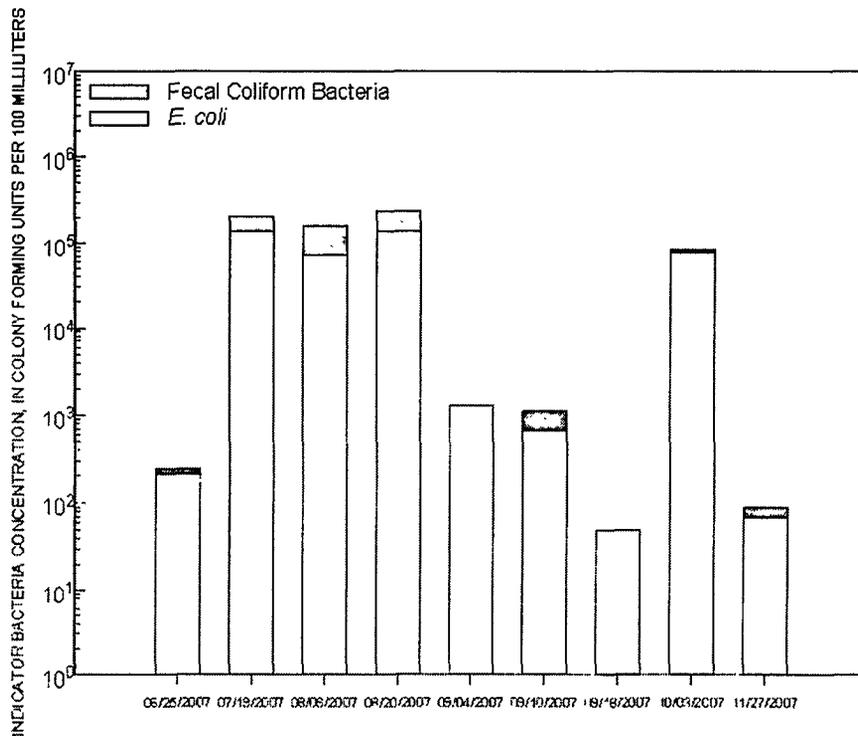


Figure 9. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415230084140602 (P3), in Lenawee County, Mich., 2007.

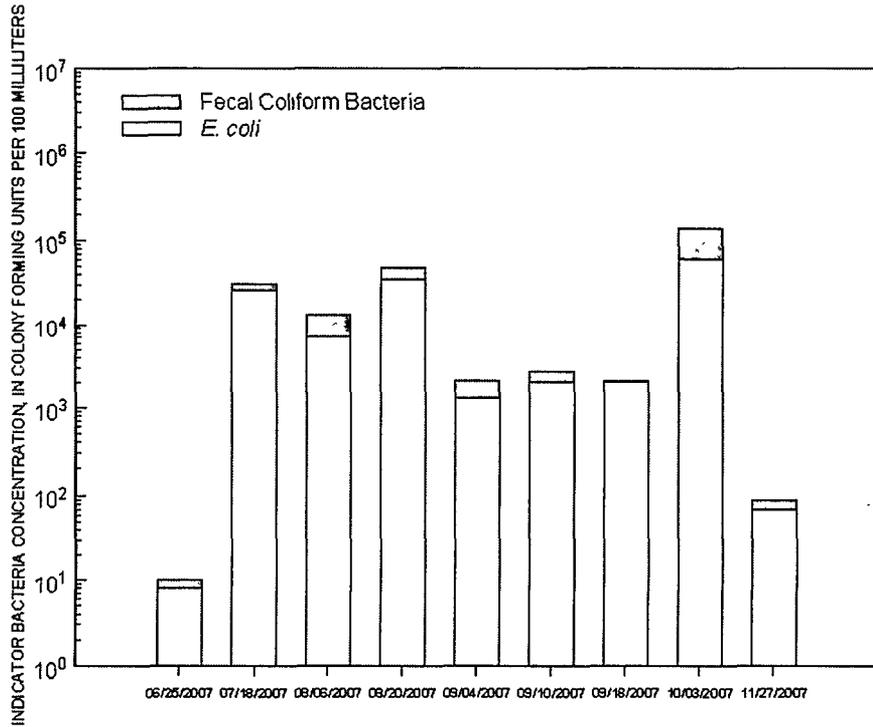


Figure 10. Fecal coliform bacteria and *Escherichia coli* concentrations by date for station 415233084140603 (P4), in Lenawee County, Mich., 2007.

Table 1. U.S. Geological Survey stations sampled in Lenawee County, Michigan.

[USGS, U.S. Geological Survey; ID, Identification]

USGS station ID	USGS field ID	Map number	USGS station name	Station type
415230084142607	D4	1	Tributary to South Branch River Raisin (site D4) near Clayton, MI	Surface water
415224084141108	D2	2	Tributary to South Branch River Raisin (site D2) near Clayton, MI	Surface water
415233084140309	D1	3	Tributary to South Branch River Raisin (site D1) near Clayton, MI	Surface water
415227084141806	W3	4	Unnamed Well W3 near Clayton, MI	Ground water
415227084141405	W2	5	Unnamed Well W2 near Clayton, MI	Ground water
415224084141604	W1	6	Unnamed Well W1 near Clayton, MI	Ground water
415223084140101	P2	7	Unnamed Storage Lagoon P2 near Clayton, MI	Place of use
415230084140602	P3	8	Unnamed Wetland Pond P3 near Clayton, MI	Place of use
415233084140603	P4	9	Unnamed Wetland Pond P4 near Clayton, MI	Place of use

Table 2. Sampling dates and conditions.

Sample number	Sampling date	Condition
1	6/25/2007	4 days prior to treatment system start
2	7/18/2007	Day 20 of system operation
3	8/6/2007	Day 39 of system operation
4	8/20/2007	Day 53 of system operation
5	9/4/2007	Day 68 of system operation
6	9/10/2007	Day 74 of system operation
7	9/18/2007	Day 82 of system operation
8	10/3/2007	10 days post system shutdown
9	11/27/2007	37 days after field drained

Table 3. Microbiological analytes and supplemental information for fecal-indicator-bacteria analysis.[*E. coli*, *Escherichia coli*; NA, Not Applicable]

Analyte	Category	Gene product	Importance
Fecal coliform	Indicator group	NA	Commonly used group of fecal indicator bacteria.
<i>E. coli</i>	Indicator group	NA	Commonly used species of fecal indicator bacteria.
<i>eaeA</i>	Gene	Intimin	Product causes tight binding of pathogenic <i>E. coli</i> to intestinal cells (Nataro and Kaper, 1998; Fagan and others, 1999).
<i>stx1</i>	Gene	Shiga toxin 1	Product causes intestinal cell death. <i>stx1</i> is associated with bovine sources (Nataro and Kaper, 1998; Fagan and others, 1999).
<i>stx2</i>	Gene	Shiga toxin 2	Product causes intestinal cell death. When found with <i>eaeA</i> is associated with human disease (Nataro and Kaper, 1998; Fagan and others, 1999).
EC	Gene	16s rRNA	Common to all <i>E. coli</i> , pathogenic and nonpathogenic (Fogarty and others, 2005).
<i>rfbO157</i>	Gene	O157 surface protein	Gene is marker for <i>E. coli</i> O157:H7 (Osek, 2003).
LTHa	Gene	Heat labile toxin	Product causes diarrheal disease in calves, commonly associated with bovine sources (Khatib and others, 2002; Chern and others, 2004).

Table 4. Microbiological data collected in Lenawee County, Michigan.

[USGS, U.S. Geological Survey; *E. coli*, *Escherichia coli*; EC, *E. coli* 16S ribosomal DNA gene that is common to all *E. coli*; +, gene present in sample; -, gene absent in sample; ns, no sample; na, not amplifiable with polymerase chain reaction]

USGS station ID	Field ID	Date	Colony forming units per 100 milliliters water		<i>Escherichia coli</i> gene data					
			Fecal coliforms	<i>E. coli</i>	<i>eaeA</i>	<i>stx2</i>	<i>stx1</i>	EC	<i>rfb</i>	LT11a
415233084140309	D1	6/25/2007	1,500	700	+	-	-	+	-	+
415224084141108	D2	6/25/2007	1,100	780	+	-	-	+	-	-
415230084142607	D4	6/25/2007	84	64	+	-	-	+	-	-
415223084140101	P2	6/25/2007	190,000	160,000	+	-	+	+	-	+
415230084140602	P3	6/25/2007	240	210	+	-	-	+	-	-
415233084140603	P4	6/25/2007	10	8	-	-	-	+	-	+
415224084141604	W1	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141405	W2	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415233084140309	D1	7/18/2007	28	28	+	-	-	+	-	-
415224084141108	D2	7/18/2007	370	310	+	-	-	+	-	+
415230084142607	D4	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415223084140101	P2	7/18/2007	480,000	370,000	+	-	+	+	-	+
415230084140602	P3	7/18/2007	210,000	140,000	+	-	+	+	-	+
415233084140603	P4	7/18/2007	31,000	26,000	+	-	+	+	+	+
415224084141604	W1	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141405	W2	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415233084140309	D1	8/6/2007	230	200	-	-	-	+	-	-
415224084141108	D2	8/6/2007	8,600	5,100	+	-	+	+	-	+
415230084142607	D4	8/6/2007	930	370	+	-	-	+	-	+
415223084140101	P2	8/6/2007	340,000	270,000	+	-	+	+	-	+
415230084140602	P3	8/6/2007	160,000	73,000	+	-	+	+	-	-
415233084140603	P4	8/6/2007	13,000	7,000	+	-	-	+	-	-
415224084141604	W1	8/6/2007	360	160	+	-	-	+	-	-
415227084141405	W2	8/6/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	8/6/2007	25,000	14,000	na	na	na	na	na	na
415233084140309	D1	8/20/2007	11,000	6,300	+	-	+	+	-	+
415224084141108	D2	8/20/2007	10,000	7,400	+	-	+	+	+	+
415230084142607	D4	8/20/2007	10,000	8,000	+	-	+	+	-	+
415223084140101	P2	8/20/2007	630,000	430,000	+	-	+	+	+	+
415230084140602	P3	8/20/2007	240,000	140,000	+	-	+	+	+	+
415233084140603	P4	8/20/2007	49,000	35,000	+	-	-	+	-	+
415224084141604	W1	8/20/2007	970	300	na	na	na	na	na	na
415227084141405	W2	8/20/2007	11,000	4,500	+	-	-	+	-	+
415227084141806	W3	8/20/2007	8,400	7,400	-	-	-	+	-	-
415233084140309	D1	9/4/2007	330	260	+	-	-	+	-	+
415224084141108	D2	9/4/2007	320	200	+	-	-	+	-	+
415230084142607	D4	9/4/2007	1200	1,100	+	-	-	+	+	+
415223084140101	P2	9/4/2007	210,000	150,000	+	-	+	+	+	+
415230084140602	P3	9/4/2007	1,300	1,300	-	-	-	+	-	+

Table 4. Microbiological data collected in Lenawee County, Michigan.

[USGS, U.S. Geological Survey; *E. coli*, *Escherichia coli*; EC, *E. coli* 16S ribosomal DNA gene that is common to all *E. coli*; +, gene present in sample; -, gene absent in sample; ns, no sample; na, not amplifiable with polymerase chain reaction]

USGS station ID	Field ID	Date	Colony forming units per 100 milliliters water		<i>Escherichia coli</i> gene data					
			Fecal coliforms	<i>E. coli</i>	<i>eaeA</i>	<i>stx2</i>	<i>stx1</i>	EC	<i>rfb</i>	LTIIa
415233084140309	D1	6/25/2007	1,500	700	+	-	-	+	-	+
415224084141108	D2	6/25/2007	1,100	780	+	-	-	+	-	-
415230084142607	D4	6/25/2007	84	64	+	-	-	+	-	-
415223084140101	P2	6/25/2007	190,000	160,000	+	-	+	+	-	+
415230084140602	P3	6/25/2007	240	210	+	-	-	+	-	-
415233084140603	P4	6/25/2007	10	8	-	-	-	+	-	+
415224084141604	W1	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141405	W2	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	6/25/2007	ns	ns	ns	ns	ns	ns	ns	ns
415233084140309	D1	7/18/2007	28	28	+	-	-	+	-	-
415224084141108	D2	7/18/2007	370	310	+	-	-	+	-	+
415230084142607	D4	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415223084140101	P2	7/18/2007	480,000	370,000	+	-	+	+	-	+
415230084140602	P3	7/18/2007	210,000	140,000	+	-	+	+	-	+
415233084140603	P4	7/18/2007	31,000	26,000	+	-	+	+	+	+
415224084141604	W1	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141405	W2	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	7/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415233084140309	D1	8/6/2007	230	200	-	-	-	+	-	-
415224084141108	D2	8/6/2007	8,600	5,100	+	-	+	+	-	+
415230084142607	D4	8/6/2007	930	370	+	-	-	+	-	+
415223084140101	P2	8/6/2007	340,000	270,000	+	-	+	+	-	+
415230084140602	P3	8/6/2007	160,000	73,000	+	-	+	+	-	-
415233084140603	P4	8/6/2007	13,000	7,000	+	-	-	+	-	-
415224084141604	W1	8/6/2007	360	160	+	-	-	+	-	-
415227084141405	W2	8/6/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	8/6/2007	25,000	14,000	na	na	na	na	na	na
415233084140309	D1	8/20/2007	11,000	6,300	+	-	+	+	-	+
415224084141108	D2	8/20/2007	10,000	7,400	+	-	+	+	+	+
415230084142607	D4	8/20/2007	10,000	8,000	+	-	+	+	-	+
415223084140101	P2	8/20/2007	630,000	430,000	+	-	+	+	+	+
415230084140602	P3	8/20/2007	240,000	140,000	+	-	+	+	+	+
415233084140603	P4	8/20/2007	49,000	35,000	+	-	-	+	-	+
415224084141604	W1	8/20/2007	970	300	na	na	na	na	na	na
415227084141405	W2	8/20/2007	11,000	4,500	+	-	-	+	-	+
415227084141806	W3	8/20/2007	8,400	7,400	-	-	-	+	-	-
415233084140309	D1	9/4/2007	330	260	+	-	-	+	-	+
415224084141108	D2	9/4/2007	320	200	+	-	-	+	-	+
415230084142607	D4	9/4/2007	1200	1,100	+	-	-	+	+	+
415223084140101	P2	9/4/2007	210,000	150,000	+	-	+	+	+	+
415230084140602	P3	9/4/2007	1,300	1,300	-	-	-	+	-	+

Table 4. Microbiological data collected in Lenawee County, Michigan.—Continued

[USGS, U.S. Geological Survey; *E. coli*, *Escherichia coli*; EC, *E. coli* 16S ribosomal DNA gene that is common to all *E. coli*; +, gene present in sample; -, gene absent in sample; ns, no sample; na, not amplifiable with polymerase chain reaction]

USGS station ID	Field ID	Date	Colony forming units per 100 milliliters water		<i>Escherichia coli</i> gene data					
			Fecal coliforms	<i>E. coli</i>	<i>eaeA</i>	<i>stx2</i>	<i>stx1</i>	EC	<i>rfb</i>	<i>LT11a</i>
415233084140603	P4	9/4/2007	2,100	1,300	-	-	-	+	-	-
415224084141604	W1	9/4/2007	250	210	+	-	-	+	-	+
415227084141405	W2	9/4/2007	36,000	17,000	+	-	-	+	-	-
415227084141806	W3	9/4/2007	1,800	1,200	+	-	-	+	-	+
415233084140309	D1	9/10/2007	3,900	2,000	+	-	+	+	-	+
415224084141108	D2	9/10/2007	2,600	1,500	+	-	+	+	+	+
415230084142607	D4	9/10/2007	6,500	4,100	+	-	-	+	-	+
415223084140101	P2	9/10/2007	410,000	300,000	+	-	+	+	+	+
415230084140602	P3	9/10/2007	1,100	670	+	-	-	+	-	-
415233084140603	P4	9/10/2007	2,700	2,000	-	-	+	+	-	+
415224084141604	W1	9/10/2007	1,800	500	+	-	-	+	-	-
415227084141405	W2	9/10/2007	3,200	2,600	-	-	-	+	-	-
415227084141806	W3	9/10/2007	46	42	-	-	-	+	-	+
415233084140309	D1	9/18/2007	730	530	-	-	-	+	-	-
415224084141108	D2	9/18/2007	1100	770	+	-	-	+	-	-
415230084142607	D4	9/18/2007	770	530	+	-	+	+	-	+
415223084140101	P2	9/18/2007	170,000	160,000	+	-	+	+	+	+
415230084140602	P3	9/18/2007	50	50	-	-	-	+	-	-
415233084140603	P4	9/18/2007	2,100	2,000	-	-	-	+	-	+
415224084141604	W1	9/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141405	W2	9/18/2007	ns	ns	ns	ns	ns	ns	ns	ns
415227084141806	W3	9/18/2007	14	12	-	-	-	+	-	+
415233084140309	D1	10/3/2007	2,000	1,400	+	-	-	+	-	-
415224084141108	D2	10/3/2007	660	380	+	-	-	+	-	-
415230084142607	D4	10/3/2007	570	410	+	-	+	+	-	+
415223084140101	P2	10/3/2007	1,260,000	390,000	+	-	+	+	+	+
415230084140602	P3	10/3/2007	83,000	76,000	+	-	+	+	-	+
415233084140603	P4	10/3/2007	140,000	60,000	+	-	-	+	-	+
415224084141604	W1	10/3/2007	38	20	-	-	-	+	-	-
415227084141405	W2	10/3/2007	2,000	670	+	-	-	+	+	-
415227084141806	W3	10/3/2007	6,800	4,400	+	-	-	+	+	+
415233084140309	D1	11/27/2007	2,500	1,800	+	+	+	+	-	+
415224084141108	D2	11/27/2007	1,900	1,200	+	-	+	+	+	+
415230084142607	D4	11/27/2007	2,700	1,500	+	-	+	+	+	+
415223084140101	P2	11/27/2007	860,000	540,000	+	-	+	+	+	+
415230084140602	P3	11/27/2007	90	70	+	-	-	+	-	+
415233084140603	P4	11/27/2007	90	70	-	-	-	+	-	-
415224084141604	W1	11/27/2007	300	130	-	-	-	+	-	+
415227084141405	W2	11/27/2007	670	400	-	-	-	+	-	+
415227084141806	W3	11/27/2007	9,900	4,700	-	-	-	+	-	-
415233084140309	D1 Rep	8/6/2007	460	300	-	-	-	+	-	-
415223084140101	P2 Rep	8/6/2007	390,000	310,000	+	-	+	+	-	+

Wilcox, Rhonda (MDA)

From: julie burkey <julieaburkey@gmail.com>
Sent: Wednesday, January 22, 2014 8:34 AM
To: Wilcox, Rhonda (MDA)
Subject: Re: in reference to GAAMP Site Selection and Odor Control for New and Expanding Livestock Facilities
Attachments: comments_1390396100.csv; signatures_1390396116.csv; petition.pdf

Dear Mr. / Ms. Wilcox,

I apologize for the form of address above, however, I was unable to find on the state website any information as to your gender.

I wanted to again touch base with you this morning, as you are getting ready to go into your meeting dealing with the proposed changes to the GAAMPS.

I have attached the current (as of 8:10am) signature & comment list from my petition on Change.org. I implore you & your colleagues to do away with the changes to the site selection GAAMP; specifically the section that deems residential zoned areas unsuitable for the keeping of any (even 1) livestock animals; and the definition of a livestock facility. I assure you that any farm keeping less than 50 (less than 100!) "animal units" is just that-- a farm! Not a "livestock facility". Most of the farmers (as opposed to factory running business people) I know are committed to the health & well being of not only themselves, and their animals but to their greater community. They certainly are caring for their animals in much more humane conditions than are outlined as necessary in the "Care of Farm Animals" GAAMP!! (have you even read that document?!? that is "care" of an animal? I think not! However, that is a topic for another day.)

As to the zoning issue: If you carefully examine, & trace the ownership of much of the "agriculture zoned" areas in the state, you will find that these large parcels of land are owned by big ag, big business. Most of the small family farms are now located in areas deemed "residential" simply due to past political & financial reasons. With the advent of big ag, most traditional family run farms were over time forced to sell off parcel by parcel most of their land simply to continue to live.

Also, as to the people who are raising chickens, bees, rabbits, or even goats in urban or suburban areas, again they are invested in their communities in a way that big ag will NEVER be. These urban farmers often provide education & free food to their community at large. Their ability to supplement their offerings of produce with the addition of eggs, meat, honey & dairy products is a crucial part of providing HEALTHY locally grown food to people who otherwise may not have adequate access.

I wish that you and your colleagues could take the time to visit these people/ farms/ community centers to determine what impact these proposed changes could have on food safety & security in MI. I hope you have done adequate research into the state of food in our state. I hope, at the very least, you have all had the chance to read any of the books by Michael Pollen, Joel Salatin, et al who are immersed in the food culture of this country! One quick read that touches on the very subjects under discussion is *The American Way of Eating*, Tracie McMillan .

Please, again, reconsider the impact your actions will have on the future of our state.

respectfully,
Julie Burkey

On Mon, Jan 20, 2014 at 5:06 PM, julie burkey <julieaburkey@gmail.com> wrote:

I oppose the inclusion of Category 4 sites because these localized regulations should be left to city zoning ordinances and not state governance, lot size and livestock size are not taken into account on the state level where they are on the city level.

The right to farm is part of the heritage of Michigan. We started as a farming state, & still are one of the top food producing states in the country. The inability of individuals to raise their own livestock for consumption or sale on a small, individual scale will be nothing less than the end of safe food & local economies.

Urban farms provide access to fresh food for many who otherwise reside in food deserts, the link to history, the ability to earn a living wage, the opportunity for community growth & involvement. & for people like me, a 3rd generation farmer who is finally realizing my dream of getting back to my roots & back to the land, the ability to keep my own livestock is an homage to my ancestors.

Don't let these laws lead to the complete moral & societal bankruptcy of this great state! Support small farmers & Stand up for clean, fresh, local food!!

Respectfully,

Julie A Burkey,

Kalamazoo, MI

Name	City	State	Zip Code	Country	Signed On
julie burkey	kalamazoo	Michigan	49001	United States	01/20/2014
Amanda Ramsey	Kalamazoo	Michigan	49009	United States	01/20/2014
Jessica Westman	Big Rapids Township	Michigan	49307	United States	01/20/2014
Jake Youngblood	Portage	Michigan	49024	United States	01/20/2014
Michele Richards	Kalamazoo	Michigan	49006	United States	01/20/2014
Rolland Lucas	White Pigeon	Michigan	49099	United States	01/20/2014
Grace Orlando	Kalamazoo	Michigan	49006	United States	01/20/2014
Coreen Geary	Kalamazoo	Michigan	49008	United States	01/20/2014
Flip Richards	Muskegon	Michigan	49445	United States	01/20/2014
Kathleen Forestieri	Benton Harbor	Michigan	49022	United States	01/20/2014
Norm Allen	Sturgis	Michigan	49091	United States	01/20/2014
Virginia Hudson	Kalamazoo	Michigan	49048	United States	01/20/2014
Dondi Frailing	Caspian	Michigan	49915	United States	01/20/2014
Carrie Rouse	Kalamazoo	Michigan	49009	United States	01/20/2014
Kori Jock	Kalamazoo	Michigan	49001	United States	01/20/2014
Steve Putans	grand rapids	Michigan	49505	United States	01/20/2014
Zac Brownell	Kalamazoo	Michigan	49001	United States	01/20/2014
Theresa VanderSchie	Kalamazoo	Michigan	49009	United States	01/20/2014
Judith Sherrod	Kalamazoo	Michigan	49008	United States	01/20/2014
Kathy VanHammen	Delton	Michigan	49046	United States	01/20/2014
David Burkey	Kalamazoo	Michigan	49009	United States	01/20/2014
Kathy Dorr	Lawrence	Michigan	49064-9314	United States	01/20/2014

Matt Davis	Kalamazoo	Michigan	49048	United States	01/20/2014
Errin IRONSIDE	Paw Paw	Michigan	49079	United States	01/20/2014
Shelby Pierce	Portage	Michigan	49024	United States	01/20/2014
Christopher Lebeda	Lawrence	Michigan	49064	United States	01/20/2014
Julie Hamel	Portage	Michigan	49024	United States	01/20/2014
Ryan Jock	Springfield Township	Michigan	48350	United States	01/20/2014
Teresa Cooper	Richland	Michigan	49083	United States	01/20/2014
James Rodgers	Kalamazoo Michigan	Michigan	49007	United States	01/20/2014
Todd Bannon	Kalamazoo	Michigan	49009	United States	01/20/2014
Concerned Citizen	New City	New York	2406	United States	01/20/2014
Heidi Stevenson	Marquette	Michigan	49855	United States	01/21/2014
Gary Newton	Galesburg	Michigan	49053	United States	01/21/2014
Rebecca Williams	ypsilanti	Michigan	48197	United States	01/21/2014
Jennifer Stroven	Kalamazoo	Michigan	49008	United States	01/21/2014
Michelle Prince	Portage	Michigan	49002	United States	01/21/2014
Elisabeth Endres	Frankenmuth	Michigan	48734	United States	01/21/2014
Jennifer nardi	Kalamazoo	Michigan	49001	United States	01/21/2014
Kelly Doyle	Kalamazoo	Michigan	49001	United States	01/21/2014
Jeanne Leadley	Portage	Michigan	49024	United States	01/21/2014
Sarah Knauss	Paducah	Kentucky	42003	United States	01/21/2014
Ann DiBella	Kalamazoo	Michigan	49004	United States	01/21/2014
Keith Oswald	East Leroy	Michigan	49051	United States	01/21/2014
Rebecca Bell	Kalamazoo	Michigan	49004	United States	01/21/2014

Sam Frazier	Mattawan	Michigan	49071	United States	01/21/2014
Zinta Aistars	Hopkins	Michigan	49328	United States	01/21/2014
Vanessa Wyant	Petaluma	California	94952	United States	01/21/2014
Keith Jones	Kalamazoo	Michigan	49008	United States	01/21/2014
Jerilyn Bell	Sand Lake	Michigan	49343	United States	01/21/2014
Jacob Gritter-Dorr	Lawrence	Michigan	49064	United States	01/21/2014
Tina Burgess	Hollister	California	95023	United States	01/21/2014
Hannah Gray	Ann Arbor	Michigan	48103	United States	01/21/2014
Sharrise Brucki	Grand Junction	Michigan	49056	United States	01/21/2014
Casey Bell	Indianapolis	Indiana	46204	United States	01/21/2014
Davids Graube	Kalamazoo	Michigan	49008	United States	01/21/2014
Erica Barajas	Kalamazoo	Michigan	49007	United States	01/21/2014
Kathleen Karpus	Grand Rapids	Michigan	49504	United States	01/21/2014
Becky Norton	Kalamazoo	Michigan	49004	United States	01/21/2014
Lori Evesque	Paw Paw	Michigan	49079	United States	01/21/2014
Ashley Juengling	Kalamazoo	Michigan	49006	United States	01/21/2014
Rita Bober	Lawton	Michigan	49065	United States	01/21/2014
shedy berrios	Jacksonville	North Carolina	28540	United States	01/21/2014
Sarah Permoda	Rose City	Michigan	48654	United States	01/21/2014
John Bayha	Kalamazoo	Michigan	49009	United States	01/21/2014
Jesse Palmer	Kalamazoo	Michigan	49001	United States	01/21/2014
Anne Cavanagh	Mattawan	Michigan	49071	United States	01/21/2014
Julianna Sauber	Three Rivers	Michigan	49093	United States	01/21/2014

Vicki Berglund	Kalamazoo	Michigan	49008	United States	01/21/2014
Christine Moser	Kalamazoo	Michigan	49004	United States	01/21/2014
Jennifer Holbrook	Three Rivers	Michigan	49093	United States	01/21/2014
Barb Stutesman	Three Rivers	Michigan	49093	United States	01/21/2014
moirez catherine			66430	France	01/21/2014
Mary Beth Johnson	Rochester Hills	Michigan	48307	United States	01/21/2014
Trudy Cary	Central Lake	Michigan	49622	United States	01/21/2014
Jody Bode	Oceanside	California	92056	United States	01/21/2014
james kavanaugh	kalamazoo	Michigan	49001	United States	01/21/2014
Chris Robins	Washington	Michigan	48094	United States	01/21/2014
Angie Rinock	Kalamazoo	Michigan	49008	United States	01/21/2014
Stacy Gearhart	Three Rivers	Michigan	49093	United States	01/21/2014
Jill Terwilliger	Kalamazoo	Michigan	49008	United States	01/21/2014
Nichole Krebiehl-Stinson	Kalamazoo	Michigan	49008	United States	01/21/2014
Susan Skillman	Wyoming	Michigan	49519	United States	01/21/2014
Traci Joseph	Allendale Charter Township	Michigan	49401	United States	01/21/2014
Kristie Brogan	Ann Arbor	Michigan	48103	United States	01/21/2014
Lisa Lamb	Walled Lake	Michigan	48390	United States	01/21/2014
Adam Weber	Hood River	Oregon	97031	United States	01/21/2014
Amy Marr	Kalamazoo	Michigan	49009	United States	01/21/2014
John Willoughby	Wyoming	Michigan	49519	United States	01/21/2014
Anne Anderson	Richland	Michigan	49083	United States	01/21/2014
Natalya Aho	East Jordan	Michigan	49727	United States	01/21/2014

Leanne Hill	White Pigeon	Michigan	49099	United States	01/21/2014
Marissa Peters	Three Rivers	Michigan	49093	United States	01/21/2014
Tammy Hibner	Kalamazoo	Michigan	49001	United States	01/21/2014
Kathy Nevelle	Kalamazoo	Michigan	49008	United States	01/21/2014
P Watson	Sanford	Florida	32773	United States	01/21/2014
Krysten Avery	Portage	Michigan	49024-7000	United States	01/21/2014
Jennifer Ray	Paw Paw	Michigan	49079	United States	01/21/2014
Casey Brooks	Gregory	Michigan	48137	United States	01/21/2014
Matthew Frayer	Kalamazoo	Michigan	49006	United States	01/21/2014
Carie Fowler	Benzonia	Michigan	49616	United States	01/21/2014
crystal jenkins	Ann Arbor	Michigan	48105	United States	01/21/2014
Sarah Coury	Kalamazoo	Michigan	49008	United States	01/21/2014
keren holdridge	Kalamazoo	Michigan	49048	United States	01/21/2014
Valerie Arledge	Portage	Michigan	49024	United States	01/21/2014
crystle partington	ann arbor	Michigan	48103	United States	01/21/2014
roy carlson	plainwell	Michigan	49080	United States	01/21/2014
Adam Clay	Lake Linden	Michigan	49945	United States	01/21/2014
Mary Marciniak	PORTAGE	Michigan	49002	United States	01/21/2014
Jill Pyatt	Battle Creek	Michigan	49015	United States	01/21/2014
Brenda Punches	Highland	Michigan	48356	United States	01/21/2014
Anne Hensley	Kalamazoo	Michigan	49008	United States	01/21/2014
Alyssa Broekema	Kalamazoo	Michigan	49001	United States	01/21/2014
Martha Youngblood	Paw Paw	Michigan	49079	United States	01/21/2014

Nicole Nixie	Waterloo	New York	13165	United States	01/21/2014
William Landreville	Kalamazoo	Michigan	49048	United States	01/21/2014
Jamie Lesman	Portage	Michigan	49024	United States	01/21/2014
Johanna Gross	Kalamazoo	Michigan	49006	United States	01/21/2014
Lea TenBrink	APO	Armed Forces Europe, Canada, Africa, or Middle East	9096	United States	01/21/2014
MerriKay Oleen-Burkey	Kalamazoo	Michigan	49006	United States	01/21/2014
Taylor Kifer	Richland	Michigan	49083	United States	01/21/2014
Melanie Guidotti	Kalamazoo	Michigan	49008	United States	01/21/2014
Steve Sirag	Woodbridge	Virginia	22193	United States	01/21/2014
Eriks Troms	Saranac	Michigan	48881	United States	01/21/2014
Anna Youngblood	Huntington Woods	Michigan	48070	United States	01/21/2014
Catherine Pickel			9096	Germany	01/21/2014
Kim Sanwald	Cloverdale	Michigan	49035	United States	01/21/2014
Cheryl Widerstedt	Central Lake	Michigan	49622	United States	01/21/2014
Colleen Lucas	Kalamazoo	Michigan	49006	United States	01/21/2014
Georgia Leventis-Molina	Kalamazoo	Michigan	49008	United States	01/21/2014
Kerri Grabiec	Kalamazoo	Michigan	49006	United States	01/21/2014
Andrew Handrich	Culver City	California	90230	United States	01/21/2014
Jennifer Rice	Kalamazoo	Michigan	49006	United States	01/21/2014
Amy Dunfee	Kalamazoo	Michigan	49008	United States	01/21/2014
Lori Poyhonen	Macomb	Michigan	48042	United States	01/21/2014

Dale Harrison	Kalamazoo	Michigan	49009	United States	01/21/2014
neil juhl	Portage	Michigan	49024	United States	01/22/2014
Sarah DePew	Ashland	Ohio	44805	United States	01/22/2014
Elizabeth Siegel	Kalamazoo	Michigan	49009	United States	01/22/2014
patricia greiner	rapid city	Michigan	49676	United States	01/22/2014
Leilani Ruesink	Three Rivers	Michigan	49093	United States	01/22/2014
Frances Martin	Ann Arbor	Michigan	48103	United States	01/22/2014
Scott Campbell	Portage	Michigan	49024	United States	01/22/2014
Larry Bartz	zeeland West Bloomfield	Michigan	49464	United States	01/22/2014
Shanna Voss	Township	Michigan	48322	United States	01/22/2014
Julie Henderson	Kalamazoo	Michigan	49008	United States	01/22/2014
Melinda Wright	Ada	Michigan	49301	United States	01/22/2014
Kendrah Streeter	Kalamazoo	Michigan	49008	United States	01/22/2014
Brett Toman	Kalamazoo	Michigan	49006	United States	01/22/2014
Chris DeBoer	saint joseph	Michigan	49085	United States	01/22/2014
Tina DeForest	Central Lake	Michigan	49622	United States	01/22/2014
Denise Batterbee	Central Lake	Michigan	49622	United States	01/22/2014
Matthew Schaeberle	Ann Arbor	Michigan	48104	United States	01/22/2014
Thomas Troms	West Branch	Michigan	48661	United States	01/22/2014
tim staggs	portage	Michigan	49002	United States	01/22/2014
Rob Zimmer	Kalamazoo	Michigan	49001	United States	01/22/2014
Sally Reynolds	Kalamazoo	Michigan	49001	United States	01/22/2014

Michelle Melicosta	APO	Armed Forces Europe, Canada, Africa, or Middle East	9096	United States United	01/22/2014
Earl Patterson	Lansing	Michigan	48910	United States United	01/22/2014
Traci Selvidge	Kalamazoo	Michigan	49001	United States United	01/22/2014
Jim Flatt	Kalamazoo	Michigan	49001	United States United	01/22/2014
Kim Taylor	Racine	Wisconsin	53402	United States	01/22/2014

Name	City	State	Zip	Country	SignedOn	Comment
Virginia Hudson	Kalamazoo	MI	49048	United States	01/20/2014	I support locally grown food; my local farmer's markets, my friends who have eggs, honey and veggies for sale. I love the small farmers and what they provide for our community!
Theresa VanderSchie	Kalamazoo	MI	49009	United States	01/20/2014	Small farmers and their farms are vital to our economy and to their livelihood as well as supporting local foodbanks and Farmers Markets!
Kathy Dorr	Lawrence	MI	49064-9314	United States	01/20/2014	I want to continue to enjoy my right to raise animals in my backyard.
Matt Davis	Kalamazoo	MI	49048	United States	01/20/2014	Backyard chickens, and CSA.
Errin IRONSIDE	Paw Paw	MI	49079	United States	01/20/2014	I value the right to continue my homestead practices.
Teresa Cooper	Richland	MI	49083	United States	01/20/2014	I am a beekeeper that realizes the many backyard beekeepers are critical to keeping our ecosystem strong.
Todd Bannon	Kalamazoo	MI	49009	United States	01/20/2014	As mega-agribusiness continues to influence our government to eliminate consumer protections on what we put in our bodies, it is even more important to protect the rights of individual and small scale farming.
Gary Newton	Galesburg	MI	49053	United States	01/21/2014	I'm a beekeeper and may expand to chickens and other things for natural untainted food supplies

Jeanne Leadley	Portage	MI	49024	United States	01/21/2014	I support small local farmers and families that want to raise their own food including my daughter who is an urban farmer in Michigan
Rebecca Bell	Kalamazoo	MI	49004	United States	01/21/2014	I should have the right to keep a small number of unobtrusive livestock on my suburban hobby farm!
Sam Frazier	Mattawan	MI	49071	United States	01/21/2014	The importance of individual rights should not be infringed upon, and these rights include the right to utilize your property as a vehicle for providing for you and your family.
Hannah Gray	Ann Arbor	MI	48103	United States	01/21/2014	We need diversified food systems that include small scale growers in order to continue to thrive as an agricultural state.
Sharrise Brucki	Grand Junction	MI	49056	United States	01/21/2014	I wish to grow safe food where I live, plain and simple!
Erica Barajas	Kalamazoo	MI	49007	United States	01/21/2014	Food sovereignty is a basic human right. Please support small farmers in Michigan!
Lori Evesque	Paw Paw	MI	49079	United States	01/21/2014	It is important for all people interested in where their food comes from. Our ability to support very small scale local farmers as well as participate in the local food scene by raising food for ourselves and selling the surplus to others is at stake here.
Rita Bober	Lawton	MI	49065	United States	01/21/2014	Small farmers and their farms are vital to the sustainability of our local economy.
Sarah Permoda	Rose City	MI	48654	United States	01/21/2014	I am a small-scale beekeeper and horse owner.

Chris Robins	Washington	MI	48094	United States	01/21/2014	I have a hobby farm and my kids raise animals for 4H.
Jill Terwilliger	Kalamazoo	MI	49008	United States	01/21/2014	What's the difference between a couple chickens and a big, loud dog? The dog is actually dangerous and doesn't produce any food. The chicken's eat up kitchen waste, cluck once in a while, fertilize the garden, and make eggs for their owners (and maybe even some chicken). Please protect our small urban "farmers."
Amy Marr	Kalamazoo	MI	49009	United States	01/21/2014	As a country landowner in a residentially zoned area, I want to continue to have the right to produce my own eggs and honey on my land.
Kathy Nevelle	Kalamazoo	MI	49008	United States	01/21/2014	We should all have the right to grow our own food and keep livestock within reason... Keep big government out of our everyday life please.
Valerie Arledge	Portage	MI	49024	United States	01/21/2014	Everyone should be able to use their property to raise food and have chickens for eggs. I support the rights of all small-scale farming in Michigan.
roy carlson	plainwell	MI	49080	United States	01/21/2014	to save the bees
Jill Pyatt	Prescott	AZ	86303	United States	01/21/2014	Our communities are more resilient (in many ways) with yard agriculture; children's lives are enriched by interacting with chickens and goats; the local economy is bolstered; people are healthier.
Anne Hensley	Merrill	MI	49008	United States	01/21/2014	Food security relies on community self-reliance. This sounds a lot like big ag trying to squeeze the little guy.
William Landreville	Kalamazoo	MI	49048	United States	01/21/2014	I have friends who depend on this as support income. It also infringes on the rights of all persons who wish to to use less toxic ways to provide food to their families, friends, and customers.

Lea TenBrink	APO	AE	9096	United States	01/21/2014	we are residents of MI and planning to retire - and have a hobby farm. I want NO legislature to not only affect OUR dream of retirement but to also not lose common sense - if people can small-scale farm responsibly in urban, suburban, or rural then the community benefits.
MerriKay Oleen-Burkey	Kalamazoo	MI	49006	United States	01/21/2014	Small-scale farming operations are providing a healthy food source for many Michigan families and should have the support of the Michigan Department of Agriculture.
Kim Sanwald	Cloverdale	MI	49035	United States	01/21/2014	As co-owner of Brickyard Farms, LLC, we believe the rights of small, local farmers should be protected, not trampled by large, corporate and political interests!
Cheryl Widerstedt	Central Lake	MI	49622	United States	01/21/2014	I always have enjoyed and want to continue to enjoy local farm produce where I know who and how my food is grown/raised.
Kim Sanwald	Cloverdale	MI	49035	United States	01/21/2014	As co-owner of Brickyard Farms, LLC we feel our rights are being trampled by political, corporate and moneyed interests. We cannot allow this to happen.
Andrew Handrich	Culver City	CA	90230	United States	01/21/2014	I grew up in Michigan and small scale farming is a necessity, especially when local, sustainable, organic options aren't very accessible in most of Michigan.
Jennifer Rice	Kalamazoo	MI	49006	United States	01/21/2014	In a changing climate and world economy, we need to preserve the right of citizens to re-localize their food sources.
Elizabeth Siegel	Kalamazoo	MI	49009	United States	01/22/2014	Folks should not be impeded growing food for their households, whether that be a few hens in the backyard, a small orchard, or a plot of land planted to supplement their table. Folks should be encouraged to to support themselves and biodiversity in their backyard or or on their patio.
patricia greiner	rapid city	MI	49676	United States	01/22/2014	I feel it is important to preserve small farms to enable people to grow their own meat as well as food for their families

Matthew Schaeberle	Ann Arbor	MI	48104	United States	01/22/2014	i believe this is completely wrong
Rob Zimmer	Kalamazoo	MI	49001	United States	01/22/2014	This is important because food is important, and we have a right to raise our own if we want.
Sally Reynolds	KALAMAZOO	MI	49001	United States	01/22/2014	Farmer's Market
Jim Flatt	Kalamazoo	MI	49001	United States	01/22/2014	I prefer to get my food locally, so that I know where it comes from and who is raising/growing it. This will ruin small, local farms and we'll be forced to accept whatever "food" comes from the giant processing factories.

change.org

Recipient: Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division

Letter: Greetings,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Signatures

Name	Location	Date
julie burkey	kalamazoo, MI, United States	2014-01-20
Amanda Ramsey	Kalamazoo, MI, United States	2014-01-20
Jessica Westman	Big Rapids Township, MI, United States	2014-01-20
Jake Youngblood	Portage, MI, United States	2014-01-20
Michele Richards	Kalamazoo, MI, United States	2014-01-20
Rolland Lucas	White Pigeon, MI, United States	2014-01-20
Grace Orlando	Kalamazoo, MI, United States	2014-01-20
Coreen Geary	Kalamazoo, MI, United States	2014-01-20
Flip Richards	Muskegon, MI, United States	2014-01-20
Kathleen Forestieri	Benton Harbor, MI, United States	2014-01-20
Norm Allen	Sturgis, MI, United States	2014-01-20
Virginia Hudson	Kalamazoo, MI, United States	2014-01-20
Dondi Frailing	Caspian, MI, United States	2014-01-20
Carrie Rouse	Kalamazoo, MI, United States	2014-01-20
Kori Jock	Kalamazoo, MI, United States	2014-01-20
Steve Putans	grand rapids, MI, United States	2014-01-20
Zac Brownell	Kalamazoo, MI, United States	2014-01-20
Theresa VanderSchie	Kalamazoo, MI, United States	2014-01-20
Judith Sherrod	Kalamazoo, MI, United States	2014-01-20
Kathy VanHammen	Delton, MI, United States	2014-01-20
David Burkey	Kalamazoo, MI, United States	2014-01-20
Kathy Dorr	Lawrence, MI, United States	2014-01-20
Matt Davis	Kalamazoo, MI, United States	2014-01-20
Errin IRONSIDE	Paw Paw, MI, United States	2014-01-20
Shelby Pierce	Portage, MI, United States	2014-01-20
Christopher Lebeda	Lawrence, MI, United States	2014-01-20
Julie Hamel	Portage, MI, United States	2014-01-20
Ryan Jock	Springfield Township, MI, United States	2014-01-20
Teresa Cooper	Richland, MI, United States	2014-01-20
James Rodgers	Kalamazoo Michigan, MI, United States	2014-01-20

Name	Location	Date
Todd Bannon	Kalamazoo, MI, United States	2014-01-20
Concerned Citizen	New City, NY, United States	2014-01-20
Heidi Stevenson	Marquette, MI, United States	2014-01-21
Gary Newton	Galesburg, MI, United States	2014-01-21
Rebecca Williams	Ypsilanti, MI, United States	2014-01-21
Jennifer Stroven	Kalamazoo, MI, United States	2014-01-21
Michelle Prince	Portage, MI, United States	2014-01-21
Elisabeth Endres	Frankenmuth, MI, United States	2014-01-21
Jennifer nardi	Kalamazoo, MI, United States	2014-01-21
Kelly Doyle	Kalamazoo, MI, United States	2014-01-21
Jeanne Leadley	Portage, MI, United States	2014-01-21
Sarah Knauss	Paducah, KY, United States	2014-01-21
Ann DiBella	Kalamazoo, MI, United States	2014-01-21
Keith Oswald	East Leroy, MI, United States	2014-01-21
Rebecca Bell	Kalamazoo, MI, United States	2014-01-21
Sam Frazier	Mattawan, MI, United States	2014-01-21
Zinta Aistars	Hopkins, MI, United States	2014-01-21
Vanessa Wyant	Petaluma, CA, United States	2014-01-21
Keith Jones	Kalamazoo, MI, United States	2014-01-21
Jerilyn Bell	Sand Lake, MI, United States	2014-01-21
Jacob Gritter-Dorr	Lawrence, MI, United States	2014-01-21
Tina Burgess	Hollister, CA, United States	2014-01-21
Hannah Gray	Ann Arbor, MI, United States	2014-01-21
Sharrise Brucki	Grand Junction, MI, United States	2014-01-21
Casey Bell	Indianapolis, IN, United States	2014-01-21
Dauids Graube	Kalamazoo, MI, United States	2014-01-21
Erica Barajas	Kalamazoo, MI, United States	2014-01-21
Kathleen Karpus	Grand Rapids, MI, United States	2014-01-21
Becky Norton	Kalamazoo, MI, United States	2014-01-21
Lori Evesque	Paw Paw, MI, United States	2014-01-21
Ashley Juengling	Kalamazoo, MI, United States	2014-01-21
Rita Bober	Lawton, MI, United States	2014-01-21

Name	Location	Date
shedy berrios	Jacksonville, NC, United States	2014-01-21
Sarah Permoda	Rose City, MI, United States	2014-01-21
John Bayha	Kalamazoo, MI, United States	2014-01-21
Jesse Palmer	Kalamazoo, MI, United States	2014-01-21
Anne Cavanagh	Mattawan, MI, United States	2014-01-21
Julianna Sauber	Three Rivers, MI, United States	2014-01-21
Vicki Berglund	Kalamazoo, MI, United States	2014-01-21
Christine Moser	Kalamazoo, MI, United States	2014-01-21
Jennifer Holbrook	Three Rivers, MI, United States	2014-01-21
Barb Stutesman	Three Rivers, MI, United States	2014-01-21
moirez catherine	France	2014-01-21
Mary Beth Johnson	Rochester Hills, MI, United States	2014-01-21
Trudy Cary	Central Lake, MI, United States	2014-01-21
Jody Bode	Oceanside, CA, United States	2014-01-21
james kavanaugh	kalamazoo, MI, United States	2014-01-21
Chris Robins	Washington, MI, United States	2014-01-21
Angie Rinock	Kalamazoo, MI, United States	2014-01-21
Stacy Gearhart	Three Rivers, MI, United States	2014-01-21
Jill Terwilliger	Kalamazoo, MI, United States	2014-01-21
Nichole Krebiehl-Stinson	Kalamazoo, MI, United States	2014-01-21
Susan Skillman	Wyoming, MI, United States	2014-01-21
Traci Joseph	Allendale Charter Township, MI, United States	2014-01-21
Kristie Brogan	Ann Arbor, MI, United States	2014-01-21
Lisa Lamb	Walled Lake, MI, United States	2014-01-21
Adam Weber	Hood River, OR, United States	2014-01-21
Amy Marr	Kalamazoo, MI, United States	2014-01-21
John Willoughby	Wyoming, MI, United States	2014-01-21
Anne Anderson	Richland, MI, United States	2014-01-21
Natalya Aho	East Jordan, MI, United States	2014-01-21
Leanne Hill	White Pigeon, MI, United States	2014-01-21
Marissa Peters	Three Rivers, MI, United States	2014-01-21

Name	Location	Date
Tammy Hibner	Kalamazoo, MI, United States	2014-01-21
Kathy Nevelle	Kalamazoo, MI, United States	2014-01-21
P Watson	Sanford, FL, United States	2014-01-21
Krysten Avery	Portage, MI, United States	2014-01-21
Jennifer Ray	Paw Paw, MI, United States	2014-01-21
Casey Brooks	Gregory, MI, United States	2014-01-21
Matthew Frayer	Kalamazoo, MI, United States	2014-01-21
Carie Fowler	Benzonia, MI, United States	2014-01-21
crystal jenkins	Ann Arbor, MI, United States	2014-01-21
Sarah Coury	Kalamazoo, MI, United States	2014-01-21
keren holdridge	Kalamazoo, MI, United States	2014-01-21
Valerie Arledge	Portage, MI, United States	2014-01-21
crystle partington	ann arbor, MI, United States	2014-01-21
roy carlson	plainwell, MI, United States	2014-01-21
Adam Clay	Lake Linden, MI, United States	2014-01-21
Mary Marciniak	PORTAGE, MI, United States	2014-01-21
Jill Pyatt	Battle Creek, MI, United States	2014-01-21
Brenda Punches	Highland, MI, United States	2014-01-21
Anne Hensley	Kalamazoo, MI, United States	2014-01-21
Alyssa Broekema	Kalamazoo, MI, United States	2014-01-21
Martha Youngblood	Paw Paw, MI, United States	2014-01-21
Nicole Nixie	Waterloo, NY, United States	2014-01-21
William Landreville	Kalamazoo, MI, United States	2014-01-21
Jamie Lesman	Portage, MI, United States	2014-01-21
Johanna Gross	Kalamazoo, MI, United States	2014-01-21
Lea TenBrink	APO, AE, United States	2014-01-21
MerriKay Oleen-Burkey	Kalamazoo, MI, United States	2014-01-21
Taylor Kifer	Richland, MI, United States	2014-01-21
Melanie Guidotti	Kalamazoo, MI, United States	2014-01-21
Steve Sirag	Woodbridge, VA, United States	2014-01-21
Eriks Troms	Saranac, MI, United States	2014-01-21
Anna Youngblood	Huntington Woods, MI, United States	2014-01-21

Name	Location	Date
Catherine Pickel	Germany	2014-01-21
Kim Sanwald	Cloverdale, MI, United States	2014-01-21
Cheryl Widerstedt	Central Lake, MI, United States	2014-01-21
Colleen Lucas	Kalamazoo, MI, United States	2014-01-21
Georgia Leventis-Molina	Kalamazoo, MI, United States	2014-01-21
Kerri Grabiec	Kalamazoo, MI, United States	2014-01-21
Andrew Handrich	Culver City, CA, United States	2014-01-21
Jennifer Rice	Kalamazoo, MI, United States	2014-01-21
Amy Dunfee	Kalamazoo, MI, United States	2014-01-21
Lori Poyhonen	Macomb, MI, United States	2014-01-21
Dale Harrison	Kalamazoo, MI, United States	2014-01-21
neil juhl	Portage, MI, United States	2014-01-22
Sarah DePew	Ashland, OH, United States	2014-01-22
Elizabeth Siegel	Kalamazoo, MI, United States	2014-01-22
patricia greiner	rapid city, MI, United States	2014-01-22
Leilani Ruesink	Three Rivers, MI, United States	2014-01-22
Frances Martin	Ann Arbor, MI, United States	2014-01-22
Scott Campbell	Portage, MI, United States	2014-01-22
Larry Bartz	zeeland, MI, United States	2014-01-22
Shanna Voss	West Bloomfield Township, MI, United States	2014-01-22
Julie Henderson	Kalamazoo, MI, United States	2014-01-22
Melinda Wright	Ada, MI, United States	2014-01-22
Kendrah Streeter	Kalamazoo, MI, United States	2014-01-22
Brett Toman	Kalamazoo, MI, United States	2014-01-22
Chris DeBoer	saint joseph, MI, United States	2014-01-22
Tina DeForest	Central Lake, MI, United States	2014-01-22
Denise Batterbee	Central Lake, MI, United States	2014-01-22
Matthew Schaeberle	Ann Arbor, MI, United States	2014-01-22
Thomas Troms	West Branch, MI, United States	2014-01-22
tim staggs	portage, MI, United States	2014-01-22
Rob Zimmer	Kalamazoo, MI, United States	2014-01-22
Sally Reynolds	Kalamazoo, MI, United States	2014-01-22

Name	Location	Date
Michelle Melicosta	APO, AE, United States	2014-01-22
Earl Patterson	Lansing, MI, United States	2014-01-22
Traci Selvidge	Kalamazoo, MI, United States	2014-01-22
Jim Flatt	Kalamazoo, MI, United States	2014-01-22
Kim Taylor	Racine, WI, United States	2014-01-22
emily whitehead	dearborn, MI, United States	2014-01-22

Wilcox, Rhonda (MDA)

From: Dave Brown <mail@changemail.org>
Sent: Wednesday, January 22, 2014 1:20 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Diana Batema, Denise Duquette...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 180 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

179. Diana Batema Flushing, Michigan
178. Denise Duquette Plainwell, Michigan
177. Carl Tenbrink Kalamazoo, Michigan
175. Alexis Hill Central Lake, Michigan
173. Erik Pye kalamazoo, Michigan



Wilcox, Rhonda (MDA)

From: Vance Hanna <mail@changemail.org>
Sent: Wednesday, January 22, 2014 2:22 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Vance Hanna, Dave Brown...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 179 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

180. Vance Hanna Bryan, Ohio
180. Dave Brown Kalamazoo, Michigan
179. Diana Batema Flushing, Michigan
178. Denise Duquette Plainwell, Michigan
177. Carl Tenbrink Kalamazoo, Michigan



Wilcox, Rhonda (MDA)

From: Casey Bell <mail@changemail.org>
Sent: Monday, January 20, 2014 11:32 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Casey Bell, Sharrise Brucki...

5 new people recently signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

There are now 55 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 55. Casey Bell Indianapolis, Indiana
- 54. Sharrise Brucki Grand Junction, Michigan
- 53. Hannah Gray Ann Arbor, Michigan
- 52. Tina Burgess Hollister, California
- 51. Jacob Gritter-Dorr Lawrence, Michigan



Wilcox, Rhonda (MDA)

From: Jerilyn Bell <mail@changemail.org>
Sent: Monday, January 20, 2014 10:39 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Jerilyn Bell Sand Lake, Michigan

There are now 50 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Keith Jones <mail@changemail.org>
Sent: Monday, January 20, 2014 10:11 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Keith Jones Kalamazoo, Michigan

There are now 49 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Vanessa Wyant <mail@changemail.org>
Sent: Monday, January 20, 2014 10:05 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Vanessa Wyant Petaluma, California

There are now 48 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Erin Girdler <mail@changemail.org>
Sent: Monday, January 20, 2014 9:55 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Erin Girdler Kalamazoo, Michigan

There are now 48 signatures on this petition. Read reasons why people are signing, and respond to julie burkey. by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Zinta Aistars <mail@changemail.org>
Sent: Monday, January 20, 2014 9:50 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Zinta Aistars Hopkins, Michigan

There are now 47 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Sam Frazier <mail@changemail.org>
Sent: Monday, January 20, 2014 9:46 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Sam Frazier Mattawan, Michigan

There are now 46 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=cee530c602a>



Wilcox, Rhonda (MDA)

From: Rebecca Bell <mail@changemail.org>
Sent: Monday, January 20, 2014 9:43 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Rebecca Bell Kalamazoo, Michigan

There are now 45 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ccee530c602a>



Wilcox, Rhonda (MDA)

From: Keith Oswald <mail@changemail.org>
Sent: Monday, January 20, 2014 9:13 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Keith Oswald East Leroy, Michigan

There are now 44 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Ann DiBella <mail@changemail.org>
Sent: Monday, January 20, 2014 9:04 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Ann DiBella Kalamazoo, Michigan

There are now 43 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Sarah Knauss <mail@changemail.org>
Sent: Monday, January 20, 2014 8:53 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Sarah Knauss Paducah, Kentucky

There are now 42 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Jeanne Leadley <mail@changemail.org>
Sent: Monday, January 20, 2014 8:33 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Jeanne Leadley Portage, Michigan

There are now 41 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Kelly Doyle <mail@changemail.org>
Sent: Monday, January 20, 2014 8:24 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Kelly Doyle Kalamazoo, Michigan

There are now 40 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Jennifer nardi <mail@changemail.org>
Sent: Monday, January 20, 2014 8:19 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Jennifer nardi Kalamazoo, Michigan

There are now 39 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Elisabeth Endres <mail@changemail.org>
Sent: Monday, January 20, 2014 8:12 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Elisabeth Endres Frankenmuth, Michigan

There are now 38 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Michelle Prince <mail@changemail.org>
Sent: Monday, January 20, 2014 7:51 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Michelle Prince Portage, Michigan

There are now 37 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: Jennifer Stroven <mail@changemail.org>
Sent: Monday, January 20, 2014 7:41 PM
To: Wilcox, Rhonda (MDA)
Subject: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

I just signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,
Jennifer Stroven Kalamazoo, Michigan

There are now 36 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>



Wilcox, Rhonda (MDA)

From: julie burkey <mail@changemail.org>
Sent: Monday, January 20, 2014 7:38 PM
To: Wilcox, Rhonda (MDA)
Subject: New petition to you: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

julie burkey started a petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" targeting you on Change.org that's starting to pick up steam.

Change.org is the world's largest petition platform that gives anyone, anywhere the tools they need to start, join and win campaigns for change. Change.org never starts petitions on our own -- petitions on the website, like "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)", are started by users.

While "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" is active, you'll receive an email each time a signer leaves a comment explaining why he or she is signing. You'll also receive periodic updates about the petition's status.

Here's what you can do right now to resolve the petition:

- Review the petition. Here's a link:
 - <http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state>
- See the 35 signers and their reasons for signing on the petition page.
- Respond to the petition creator by sending a message here:
 - <http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Sincerely,
Change.org

There are now 35 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Wilcox, Rhonda (MDA)

From: Lori Evesque <mail@changemail.org>
Sent: Tuesday, January 21, 2014 10:03 AM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Lori Evesque, Becky Norton...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 60 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 60. Lori Evesque Paw Paw, Michigan
- 59. Becky Norton Kalamazoo, Michigan
- 58. Kathleen Karpus Grand Rapids, Michigan
- 57. Erica Barajas Kalamazoo, Michigan
- 56. Davids Graube Kalamazoo, Michigan



Wilcox, Rhonda (MDA)

From: Jesse Palmer <mail@changemail.org>
Sent: Tuesday, January 21, 2014 12:05 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Jesse Palmer, John Bayha...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 65 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 65. Jesse Palmer Kalamazoo, Michigan
- 64. John Bayha Kalamazoo, Michigan
- 63. Sarah Permoda Rose City, Michigan
- 62. shedy berrios Jacksonville, North Carolina
- 61. Rita Bober Lawton, Michigan



Wilcox, Rhonda (MDA)

From: Christine Moser <mail@changemail.org>
Sent: Tuesday, January 21, 2014 12:54 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Julianna Sauber, Anne Cavanagh...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 73 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 68. Julianna Sauber Three Rivers, Michigan
- 66. Anne Cavanagh Mattawan, Michigan
- 65. Jesse Palmer Kalamazoo, Michigan
- 64. John Bayha Kalamazoo, Michigan
- 63. Sarah Permoda Rose City, Michigan



Wilcox, Rhonda (MDA)

From: Trudy Cary <mail@changemail.org>
Sent: Tuesday, January 21, 2014 1:13 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Jody Bode, Trudy Cary...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 76 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 76. Jody Bode Oceanside, California
- 75. Trudy Cary Central Lake, Michigan
- 74. Mary Beth Johnson Rochester Hills, Michigan
- 73. moirez catherine , France
- 72. Barb Stutesman Three Rivers, Michigan



Wilcox, Rhonda (MDA)

From: Stacy Gearhart <mail@changemail.org>
Sent: Tuesday, January 21, 2014 1:30 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Stacy Gearhart, Chris Robins...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 80 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 80. Stacy Gearhart Three Rivers, Michigan
- 78. Chris Robins Washington, Michigan
- 76. Jody Bode Oceanside, California
- 75. Trudy Cary Central Lake, Michigan
- 74. Mary Beth Johnson Rochester Hills, Michigan



Wilcox, Rhonda (MDA)

From: Anne Anderson <mail@changemail.org>
Sent: Tuesday, January 21, 2014 2:07 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Anne Anderson, John Willoughby...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 90 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 90. Anne Anderson Richland, Michigan
- 89. John Willoughby Wyoming, Michigan
- 88. Amy Marr Kalamazoo, Michigan
- 86. Lisa Lamb Walled Lake, Michigan
- 85. Kristie Brogan Ann Arbor, Michigan



Wilcox, Rhonda (MDA)

From: Kathy Nevelle <mail@changemail.org>
Sent: Tuesday, January 21, 2014 2:24 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Kathy Nevelle, Marissa Peters...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 95 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ccee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 95. Kathy Nevelle Kalamazoo, Michigan
- 93. Marissa Peters Three Rivers, Michigan
- 92. Leanne Hill White Pigeon, Michigan
- 90. Anne Anderson Richland, Michigan
- 89. John Willoughby Wyoming, Michigan



Wilcox, Rhonda (MDA)

From: Kristie Brogan <mail@changemail.org>
Sent: Tuesday, January 21, 2014 1:46 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Kristie Brogan, Traci Joseph...

5 new people recently signed julie burkey's petition "Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state <http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a&utm_source=target&utm_medium=email&utm_campaign=two_hundred_fifty> " on Change.org.

There are now 85 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:
<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>
<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a&utm_source=target&utm_medium=email&utm_campaign=two_hundred_fifty>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,
protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 85. Kristie Brogan Ann Arbor, Michigan
- 84. Traci Joseph Allendale Charter Township, Michigan
- 83. Susan Skillman Wyoming, Michigan
- 82. Nichole Kriebiehl-Stinson Kalamazoo, Michigan
- 81. Jill Terwilliger Kalamazoo, Michigan

<<http://api.mixpanel.com/track?data=eyJldmVudCI6Im9wZW5fZW1haWwiLCJwcm9wZXJ0aWVzIjp7ImVtYWlsX25hbWUiOiJ0d29faHVuZHZJZF9maWZ0eSIsImkljoidXNlci83NDMwOTI2IiwY2I0eSI6ImthbGFtYXpvbyIsInN0YXRlljoiTUkiLCJ6aXBjb2RlljoiNDkwMDEiLCJjb3VudHJ5X2NvZGUiOiJVUyIsImluY29tcGxldGVfYWRkcmVzcyl6ZmFsc2UsInNpZ251cF9kYXRlljoiMjAxMS0wOS0yMSIsImxvZ2luX2NvdW50Ijo0MSwidG90YWxfYWN0aW9ucyl6ODYslmNvbM5IY3RIZF90b19mYWNIYm9vaz8iOnRydWUslmdlbmRlcil6IklbWFsZSIsImFnZV9yYW5nZSIl6IjQ1LTU0Iiwic2lnbnVwX2NvbRleHQiOiJhY3Rpb25QYXJ0aWNpcGFudCIsImRpbmN0X2IkljoiZDQzYTE2MjAtY2U4OC0wMTJmLTBjYTMtNDA0MGIwOTEyOGRjliwidG9rZW4iOiIzMGFhMjZhMWQ2ZTkzYWUxNThkZmJkYzE2YjQ5MzIxMzlnRpbWUiOiJlZDQzY2EzOTAzMjk5NTV9fQ==&ip=1&img=1>>
<http://email.changemail.org/wf/open?upn=m-2F5x5CYJc2TQM91gcfEil20xTedgmhe06dAUi7h2w-2F-2BqRU7nijcfD5pwgE060ah2-2FtlJWnfKOo2IDNItRyy2bXKGY9iHkdxQf4xTTSMtLJc7nlvxkS15HOIUzzNwhALKLbYJ91TV-2FJQPmgtTmwxn6tv-2FktnNBjshnb2NkSxAlucXmzIMqco7ndRgCAa1R6D-2F5g8Y9UhaFNhxGimclCqJU-2FI6KW9yH-2BS0-2Bn4p5_CsMPBhpZRxNQzDU3LbV4agOt>

Wilcox, Rhonda (MDA)

From: Matthew Frayer <mail@changemail.org>
Sent: Tuesday, January 21, 2014 2:44 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Matthew Frayer, Jennifer Ray...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 100 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

100. Matthew Frayer Kalamazoo, Michigan
98. Jennifer Ray Paw Paw, Michigan
96. P Watson Sanford, Florida
95. Kathy Nevelle Kalamazoo, Michigan
93. Marissa Peters Three Rivers, Michigan



Wilcox, Rhonda (MDA)

From: Jill Pyatt <mail@changemail.org>
Sent: Tuesday, January 21, 2014 3:40 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Jill Pyatt, Mary Marciniak...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 110 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 110. Jill Pyatt Battle Creek, Michigan
- 109. Mary Marciniak PORTAGE, Michigan
- 108. Adam Clay Lake Linden, Michigan
- 107. roy carlson plainwell, Michigan
- 106. crystle partington ann arbor, Michigan



Wilcox, Rhonda (MDA)

From: MerriKay Oleen-Burkey <mail@changemail.org>
Sent: Tuesday, January 21, 2014 4:44 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Lea TenBrink, Johanna Gross...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 120 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

119. Lea TenBrink APO, Armed Forces Europe, Canada, Africa, or Middle East
118. Johanna Gross Kalamazoo, Michigan
117. Jamie Lesman Portage, Michigan
116. William Landreville Kalamazoo, Michigan
114. Martha Youngblood Paw Paw, Michigan



Wilcox, Rhonda (MDA)

From: Traci Selvidge <mail@changemail.org>
Sent: Wednesday, January 22, 2014 7:34 AM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Traci Selvidge, Earl Patterson...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 160 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ccee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

160. Traci Selvidge Kalamazoo, Michigan

159. Earl Patterson Lansing, Michigan

158. Michelle Melicosta APO, Armed Forces Europe, Canada, Africa, or Middle East

157. Sally Reynolds Kalamazoo, Michigan

156. Rob Zimmer Kalamazoo, Michigan



Wilcox, Rhonda (MDA)

From: tim staggs <mail@changemail.org>
Sent: Tuesday, January 21, 2014 11:58 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: tim staggs, Thomas Troms...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 155 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 155. tim staggs portage, Michigan
- 154. Thomas Troms West Branch, Michigan
- 153. Matthew Schaeberle Ann Arbor, Michigan
- 152. Denise Batterbee Central Lake, Michigan
- 150. Chris DeBoer saint joseph, Michigan



Wilcox, Rhonda (MDA)

From: Chris DeBoer <mail@changemail.org>
Sent: Tuesday, January 21, 2014 9:31 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Chris DeBoer, Brett Toman...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 150 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ceee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

- 150. Chris DeBoer saint joseph, Michigan
- 149. Brett Toman Kalamazoo, Michigan
- 147. Melinda Wright Ada, Michigan
- 145. Shanna Voss West Bloomfield Township, Michigan
- 144. Larry Bartz zeeland, Michigan



Wilcox, Rhonda (MDA)

From: patricia greiner <mail@changemail.org>
Sent: Tuesday, January 21, 2014 7:33 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Elizabeth Siegel, Sarah DePew...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 140 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=c6ee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

139. Elizabeth Siegel Kalamazoo, Michigan
138. Sarah DePew Ashland, Ohio
137. neil juhl Portage, Michigan
136. Dale Harrison Kalamazoo, Michigan
135. Lori Poyhonen Macomb, Michigan



Wilcox, Rhonda (MDA)

From: Lori Poyhonen <mail@changemail.org>
Sent: Tuesday, January 21, 2014 6:54 PM
To: Wilcox, Rhonda (MDA)
Subject: 5 new petition signatures: Lori Poyhonen, Amy Dunfee...

5 new people recently signed julie burkey's petition "[Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division: protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state](#)" on Change.org.

There are now 135 signatures on this petition. Read reasons why people are signing, and respond to julie burkey by clicking here:

<http://www.change.org/petitions/michigan-department-of-agriculture-and-rural-development-s-environmental-stewardship-division-protect-and-extend-the-rights-of-urban-suburban-and-rural-small-scale-farming-operations-throughout-the-state/responses/new?response=ccee530c602a>

Dear Michigan Department of Agriculture and Rural Development's Environmental Stewardship Division,

protect and extend the rights of urban, suburban, and rural small-scale farming operations throughout the state

Sincerely,

135. Lori Poyhonen Macomb, Michigan
134. Amy Dunfee Kalamazoo, Michigan
133. Jennifer Rice Kalamazoo, Michigan
132. Andrew Handrich Culver City, California
131. Kerri Grabiec Kalamazoo, Michigan

