

**WESTERN LAKE ERIE CAFO ANNUAL MANURE INPUTS**  
**(Raisin, St. Joseph, and Maumee Rivers) OH & MI**  
 Environmentally Concerned Citizens of South Central Michigan  
 Revised 6.2.2015 1

**Total Manure Produced, lbs. 5,111,797,576**  
**Total Animals 10,748,117**

	Dairy & Dry Cows	Heifers & Calves	Cattle	Swine < 55#	Swine > 55#	Layers & Pullets	No. of Animals 2014	*Manure, gals. @ 8.4#/gal.	*Manure, tons @2,000#/ton	
<b>MICHIGAN (Lenawee and Hillsdale Counties only, from permits)</b>										
<b>Hillsdale County</b>										
Bill White swine over 55 lbs.					7,200		7,200	1,762,860		
Bleich dairy & heifers	800	300						9,950,000	2,100	
Camden Dairy dairy (from July-Sept., 2014)	500							1,213,700	670	
Hudson Dairy dairy	3,485	40						58,013,476	15,127	
Precision Pork swine				2,110	3,800			1,654,500		
Triple T swine					4,200			770,000		
Subtotal	4,785	340	0	2,110	15,200	0	22,435	73,364,536	17,897	
<b>Lenawee County</b>										
Bakerlads dairy	510							1,800,000	6,000	
Hallwill heifers, cattle (steers)		1,800	500					3,600,000	19,500	
Hartland dairy & heifers	980	290						8,300,000	2,100	
Hoffland dairy & heifers	1,460	350						14,000,000	5,600	
Legend (formerly Bruinsma) dairy	1,850							16,400,000	1,500	
Medina Dairy dairy	3,485	40						26,119,097	3,282	
New Flevo/NFD dairy, dry cows & heifers	3,200	800						25,000,000		
State Line Farms swine					4,000			19,360,000		
Terrehaven heifers		4,000						4,000	34,250	
Subtotal	11,485	7,280	500	0	4,000	0	23,265	114,579,097	72,232	
<b>Total Michigan CAFO Animals</b>	<b>16,270</b>	<b>7,620</b>	<b>500</b>	<b>2,110</b>	<b>19,200</b>	<b>0</b>	<b>45,700</b>	<b>187,943,633</b>	<b>90,129</b>	
<b>Total Michigan Manure Produced</b>										
<b>OHIO (estimated, using Manure Production Chart)</b>										
<b>Defiance County</b>										
5C Farms cattle			3,350					9,170,625		
Hillandale Farms layers						4,105,728	4,105,728	44,957,722		
Fox Tail swine over 55 lbs								2,012,063		
VanderMade dairy	1,800							8,395,100		
Vissers dairy	1,600							8,351,200		
Subtotal	3,400	0	3,350	0	3,675	4,105,728	4,116,153	73,886,709		
<b>Henry County</b>										
Napoleon dairy	1,900							9,917,050		
Sun Mountain dairy	1,400							7,307,300		
Subtotal	3,300	0	0	0	0	0	3,300	17,224,350		
<b>Wood County</b>										
Hertzfield layers						887,167	887,167	9,714,479		
MSB dairy	2,200							11,482,900		
Reyskens dairy	2,000							10,439,000		
Subtotal	4,200	0	0	0	0	887,167	891,367	31,636,379		
<b>Fulton County</b>										
Oakshade dairy	1,750							9,134,125		
PCG Chesterfield pullets						4,800	4,800	35,040		
Bernath I and II swine over 55 lbs.					5,000			2,737,500		
Subtotal	1,750	0	0	0	5,000	4,800	11,550	11,906,665		
<b>Williams County</b>										
Bridgewater dairy	3,900							20,356,050		
Mill Creek dairy	1,838							9,593,441		
Springfield dairy	2,400							12,526,800		
Subtotal	8,138	0	0	0	0	0	8,138	42,476,291		
<b>Paulding County</b>										
Bruce Rossworn swine over 55 lbs.					4,800			2,628,000		
Canal Swine swine over 55 lbs					7,100			3,887,250		
Creek View swine over 55 lbs					4,800			2,628,000		
Deer Run swine over 55 lbs					3,500			1,916,250		
Flat Land dairy	2,400							12,526,800		
Hillside Acres swine over 55 lbs					8,800			4,818,000		
Paulding Dairy	5,410							28,237,495		
Pessefall Farms swine over 55 lbs					5,200			2,847,000		
River Bend swine over 55 lbs					3,500			1,916,250		
Rose Grove swine over 55 lbs	2,998							1,641,405		
Schilderink Dairy dairy	5,410							2,837,495		
Van Erk Dairy dairy	2,100							10,960,950		
White Oak swine over 55 lbs					2,776			1,519,860		
Zylstra Dairy dairy	1,400							7,307,300		
Subtotal	19,718	0	0	0	40,476	0	60,194	85,672,055		
<b>Van Wert County</b>										
Blue Stream Dairy dairy	2,000							10,439,000		
Feather Ridge layers						183,288	183,288	2,007,004		
Gina Dairy dairy	838							4,373,941		
Jeff and Alan Ricker swine over 55 lbs.					4,900			2,682,750		
Liberty Egg Farm layers						207,360	207,360	2,270,592		
Sugar Lane Dairy dairy	2,000							10,439,000		
Subtotal	4,838	0	0	0	4,900	390,648	400,386	32,212,287		
<b>Putnam County</b>										
Fenstermaker Farms swine over 55 lbs.					6,780			3,712,050		
Fenstermaker Farms swine under 55 lbs.				2,400				569,400		
KMLS Farms swine over 55 lbs.					3,488			1,909,680		
KMLS Farms swine under 55 lbs.				200				47,450		
Van Ham Dairy dairy	2,250							11,743,875		
Wezbra Dairy calves		1,540						5,733,420		
Subtotal	2,250	1,540	0	2,600	10,268	0	16,658	23,715,875		
<b>Auglaize County</b>										
Bowersock Pork cattle and swine over 55 lbs.		20			2,400			1,388,460		
Doenges cattle and pullets			25			163,000	163,025	1,853,288		
G.J.D. swine over 55 lbs.					4,000			2,190,000		
Heitbrink Swine Farm, LLC swine over 55 lbs.					4,800			2,628,000		
Wilker pullets						210,000	210,000	2,299,500		
Subtotal		20	25	0	11,200	373,000	384,245	10,359,248		
<b>Hancock County</b>										
Lucky 7 Farms swine over 55 lbs.					3,675			2,012,063		
Lucky 7 Farms swine under 55 lbs.				400				94,900		
Roger and Lori Rader Farms swine over 55 lbs.					4,000			2,190,000		
Subtotal	0	0	0	400	7,675	0	8,075	4,296,963		
<b>Hardin County</b>										
Vrieco Farms dairy	825							4,306,088		
Goshen Pullet Site No. 5 layers						1,970,000	1,970,000	21,571,500		
Hefners Dola Swine Farm swine over 55 lbs.					4,200			2,299,500		
Highslip Pork swine over 55 lbs.					4,000			2,190,000		
Sheldon Farms swine over 55 lbs.					4,000			2,190,000		
Subtotal	825	0	0	0	12,200	1,970,000	1,983,025	32,557,088		
<b>Wyandot County</b>										
Kalmbach Wagner Swine Research swine over 55 lbs.					3,750			2,053,125		
Kalmbach Wagner Swine Research swine under 55 lbs.				1,400				332,150		
Marseilles Layer Site #6 layers						2,814,176	2,814,176	30,815,227		
Subtotal	0	0	0	1,400	3,750	2,814,176	2,819,326	33,200,502		
<b>Total Ohio CAFO Animals</b>	<b>48,419</b>	<b>1,560</b>	<b>3,375</b>	<b>4,400</b>	<b>99,144</b>	<b>10,545,519</b>	<b>10,702,417</b>	<b>399,144,412</b>	<b>0</b>	
<b>Total Ohio Manure Produced</b>										
<b>TOTAL MI and OH CAFO Animals</b>	<b>64,689</b>	<b>9,180</b>	<b>3,875</b>	<b>6,510</b>	<b>118,344</b>	<b>10,545,519</b>	<b>10,748,117</b>	<b>587,088,045</b>	<b>90,129</b>	
<b>TOTAL MI and OH Manure Produced</b>										
<b>Total Manure Produced, lbs.</b>								gal. convert to #:	tons convert to #:	
<b>5,111,797,576</b>								<b>4,931,539,576</b>	<b>180,258,000</b>	
<b>Total Animals</b>								<b>5,111,797,576</b>	<b>(gal. + tons)</b>	
<b>10,748,117</b>										

Sources:  
 1. For Ohio: [http://www.agri.ohio.gov/apps/lepp\\_permits/dlep\\_permits.aspx](http://www.agri.ohio.gov/apps/lepp_permits/dlep_permits.aspx)  
 2. For Michigan: Individual MI NPDES/CNMP 2014 annual reports (MDEQ), Sec. 2, Line b  
 3. For Ohio manure calculations: Animal Manure Data Sheet, USDA/Washington State University, Ronald E. Hermanson, Ph.D., P.E., and Prasanta K. Kalita, Ph.D. [http://agrienvarchive.ca/bioenergy/download/animal\\_man\\_data\\_sheet\\_wsu.pdf](http://agrienvarchive.ca/bioenergy/download/animal_man_data_sheet_wsu.pdf)  
 OH calculations for wet raw manure, gal./day per animal. See below:  
 Dairy Cow 14.3  
 Dairy Heifer 10.2  
 Beef Stocker 3.5  
 Beef Feeder 6.9  
 Beef Cow 7.5  
 Horse 6  
 Nursery pig .35  
 Growing pig .65  
 Finishing pig 1.5  
 Gestating sow\* 1.38  
 Sow and litter 3.75  
 Boar\* 1.75  
 Sheep Feeder .48  
 Laying Hen .03  
 Broiler .02