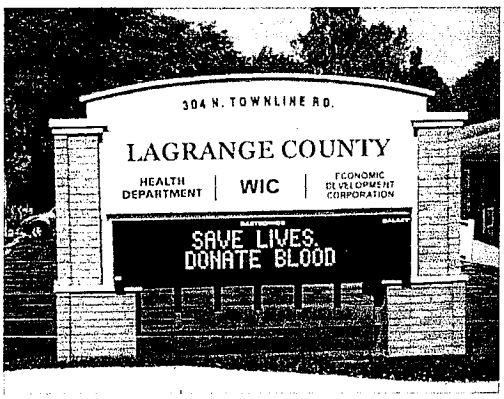
LAGRANGE COUNTY HEALTH DEPARTMENT

ANNUAL REPORT 2017



Lagrange County
Health Department

304 N Townline Rd., Suite 1
LaGrange, IN. 46761
260-499-4182

Website: lagrangecountyhealth.com

Health Officer and Board Members

Dr. T. Anthony Pechin, M.D., Health Officer
Trudy Manderfeld, President
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Dr. Jeffrey Bassett, D.D.S.
Tammy Weldon
Dr. Gregory Mielke, MD.

Health Department Staff

Dr. Alfredo Garcia, Administrator/Environmental Health Specialist
Jarod Nisley, Environmental Health Specialist
Kelly Bills, Vital Records Registrar, Office Manager
Debra Grossman, R.N.; Public Health Nurse I
Joei Gust, Public Health Nurse II
Louann Sherck, Immunization Coordinator
Shantell Gyovai, R.N.; Public Health Nurse II

WIC Department within the Health Department

Michelle Tennant, R.N.; Public Health Nurse II, WIC Coordinator
Renee Rosendaul, WIC Clinic Assistant, Breast Feeding Coordinator
Shantell Gyovai, R.N.; WIC Nutritionist

LAGRANGE COUNTY HEALTH DEPARTMENT

ANNUAL REPORT 2017

INDEX

LaGrange County Health Department
2017 Nursing Division Annual Report

Staff: Debra Grossman RN (salaried, exempt)
Joei Gust RN (full time, hourly)
Michelle Tennant RN (part-time, hourly)
Shantell Gyovai RN (part time, hourly)
LouAnn Sherck, Immunization Coordinator (full-time, hourly)

VFC Immunizations: Number of Clinics held..... 196
Number of vaccines administered..... 7,370
Number of visits made by children..... 3,454

No Show for Appointments: 210

Non -VFC	County employees, total vaccines.... 6
Non-VFC 317 Adults	Total vaccines..... 219
Non – VFC Influenza Vaccine	County Employees..... 75 Other PP flu vaccine..... 15 317 flu vaccine..... 31
PP adults and children	Vaccines total..... 150

- **Birth Certificates issued by Nursing Staff:** 58
- **Death Certificates issued by Nursing Staff:** 30
- **Calls to schedule appointments:** 3,134
- **Calls RE: Clinic Schedule:** 1,491
- **Consultations and Referrals on health questions, disease, social issues, etc**
- **Home Visits:** 1 (as mandated by ISDH for communicable disease follow-up & newborn screens)
- **Immunization Record Evaluations:** 1,808 (This total does not include evaluations done while making appointments)
- **Immunization records mailed or faxed:** 590
- **Reminder cards/past due reminders:** 1,538
- **Meetings and Training**
  Child Protection Meetings (Monthly during the school year)
  CPR recertification
  District 3 Monthly Radio Drills
  EMA
  Health Board Meetings
  Health Occupations Advisory Board
  Head Start Advisory Board
  ISDH Epi Meeting
  ISDH Regional Nurse Meeting
  Met with Regional TB Nurse from ISDH

Quarterly meetings with GSK, Sanofi vaccine reps
Staff meetings
VFC and adult 317 Recertification through ISDH, yearly
TB recertification
Preparedness meetings with District3 ISDH reps
Core 4 meetings with EMS, EMA and PLH safety rep.
CASA review w/ISDH field Rep
Beautiful Child Quality Improvement Plan
HOE students job shadowing weekly during school year
Glen Oaks Nursing student's job shadowing at LCHD Nursing
Various Goshen College and IPFW nursing or Nurse Practitioner students here to job shadow.

- **Off Site Special Immunization Clinics**
- After Hours Flu Vaccine Clinic
- Flu Vaccine clinic for county employees
- Flu Vaccine Clinic Shipshewana Town Employees
- Flu Vaccine & TB testing – Community Dental Clinic and Community Health Clinic
- After Hours Back To School Immunization Clinic
- Eddy Village Amish school clinic X 3
- Extra evening clinic at Topeka Fire Dept (well attended)

TB Mantoux Testing: Public/Daycare/schools/NE Center requirement=73

Communicable Disease Investigations/Reported Cases: See attached report.

Yearly Summary

The Nursing staff is continuing to work on the Beautiful Child of LaGrange County, as a way to increase immunization rates and to increase community knowledge regarding vaccine safety. We hired Nikki Gyovai RN to review all LaGrange County births and compare that information with our Immunization Registry. We have determined that we do have a large amount of infants who are not receiving immunizations at the recommended ages. With this information we are creating educational materials to increase parental knowledge. We will be working with the Birth Planner at Parkview/LaGrange to provide packets of information to be given to parents upon discharge. The Nursing Staff had some staffing adjustments in late 2017 with the resignation of Joei Gust RN in October and Nikki Gyovai RN in November. Advertising was begun for the search for their replacements and interviews will begin soon.

The LaGrange County Health Department has started, in 2017, the long arduous process of billing insurance companies for the vaccine and administration charges, along with billing Medicaid companies for administration fees. This has been a large learning curve, but is beginning to be fruitful. We also can now accept credit and debit card payments and this has gone well.

LaGrange County Health Department-Nursing
304 N. Townline Rd., Ste 1
LaGrange, IN 46761
Communicable Diseases 2017

Disease	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Total
Animal Bite	5	2	3	1	6	7	12	5	2	2	2	1	48
Campylobacter	1			2			3		2	3		1	12
Chlamydia Trachomatis					1	1	1	1	2	2	3	1	12
Cryptosporidium						3	1	2		1			7
E.Coli, 0157(+other)						1		1	1	2	2	1	8
Exposure (Bloodborne)													
Giardiasis				1			1	1			1		4
Haemophilus B									1				1
Hepatitis A													
Hepatitis B					1			1					2
Hepatitis C	1	2	2	2	1	2	3	2	2	1		1	19
Histoplasmosis								1		1	1	1	4
Influenza (death)												3	3
Lead, elevated													
Legionellosis		1	1										2
Meningitis, Viral													
Meningitis, Bacterial													
Mumps													1
N. Gonorrhoeae		1				1		2			2		6
Newborn Screen													
Pertussis		1	1	8	12	12	10	2	5		1		52
Rabies, potential													
Rocky Mtn. Sp. Fever													
Salmonella						1	1	4		1		1	8
Shigella													
Strep Inv A													
Strep GrpB													
Strep Pneumococcal		1		1	1			1	2		1	1	8
TB Class II (LTBI)													
West Nile Virus													
Other: (See below)													2
Lyme Disease													
Syphilis													
Invasive Strep B													
Listerosis									1			1	2
Severe MRSA/MSSA													
TB (Active)													
TB (Contact)													
TB (Suspect)													
TB (Clinical)													
LTBI				1									1
Tetanus Death													
Measles													
Varicella			1		1				1				3
ZIKA													
Total	7	8	8	16	23	28	32	23	19	13	13	12	205

HUS- Hemolytic Uremic Syndrome-1; Q Fever=Coxiella burnetti infection-1

Number of Visits to the LCHD for ISDH Vaccine For Children Program:

	January	February	March	April	May	June	July	August	Sept.	October	Nov	Dec	Year Total
2011	313	227	319	332	367	386	439	723	371	375	422	588	4,862
2012	193	198	222	304	293	358	405	469	355	400	227	196	3,620
2013	200	199	193	277	221	649	322	411	335	344	250	172	3,573
2014	127	138	180	210	236	331	408	375	364	284	245	205	3,103
2015	61	174	201	200	215	322	339	367	273	294	210	187	2,843
2016	144	122	157	210	225	410	344	525	297	340	246	182	3,202
2017	170	170	204	279	315	464	399	483	318	284	219	148	3,453
LaGrange Clinics:					**Total visits split by location:**								
2011	188	132	140	136	159	203	160	329	139	151	245	386	2,368
2012	69	93	42	95	94	85	115	203	128	159	66	62	1,211
2013	41	67	48	94	64	204	126	165	84	119	104	59	1,175
2014	47	58	37	60	73	92	126	135	147	77	95	99	1,046
2015	36	48	55	53	77	109	118	151	96	98	96	96	1,033
2016	40	66	63	76	89	140	79	167	101	153	90	67	1,131
2017	75	66	76	85	137	105	141	189	96	96	108	52	1,226
Shipshewana Clinics:													
2011	44	52	80	99	108	61	131	187	121	101	113	81	1,178
2012	57	67	68	116	56	122	142	159	121	108	102	84	1,202
2013	73	63	81	66	91	246	62	127	126	103	92	44	1,174
2014	32	22	63	71	69	127	113	134	101	96	89	54	971
2015	25	48	58	58	81	110	94	121	107	86	65	57	910
2016	36	43	52	62	55	136	124	164	93	95	87	39	986
2017	44	44	51	86	116	164	128	150	92	90	60	48	1,073
Topeka Clinics:													
2011	81	43	99	97	100	122	148	207	111	123	64	121	1,316
2012	67	38	98	93	143	151	148	107	106	133	59	50	1,193
2013	86	69	64	117	66	244	134	119	125	122	54	69	1,269
2014	48	58	80	79	94	112	169	106	116	111	61	52	1,086
2015	0	78	88	89	57	103	127	95	70	110	49	34	900
2016	68	35	42	72	81	134	141	194	103	92	69	76	1,107
2017	51	60	77	108	62	195	130	144	119	98	51	54	1,149
					Total Number of Vaccines Administered:								
2011	592	482	686	717	803	856	936	1,649	844	752	773	995	10,085
2012	404	423	473	618	640	734	845	1,045	783	846	446	391	7,648
2013	422	422	401	603	469	694	701	953	715	727	484	367	6,958
2014	282	296	384	445	468	685	883	788	765	557	439	404	6,396
2015	127	375	425	416	435	699	709	778	591	566	422	385	5928
2016	321	277	375	488	514	960	740	1138	642	665	517	409	7046
2017	381	362	478	610	672	1018	843	976	681	569	465	315	7370

1-F

LaGrange County Health Department
www.lagrangecountyhealth.com

Protecting the place where we live!!!...

304 N. Townline Rd. Suite 1. LaGrange, IN 46761-1319*Phone (260) 499-4182 extension 7*Fax (260) 499-4189

ENVIRONMENTAL HEALTH OFFICE

SANITARIANS ACTIVITIES REPORT (JANUARY-DECEMBER)

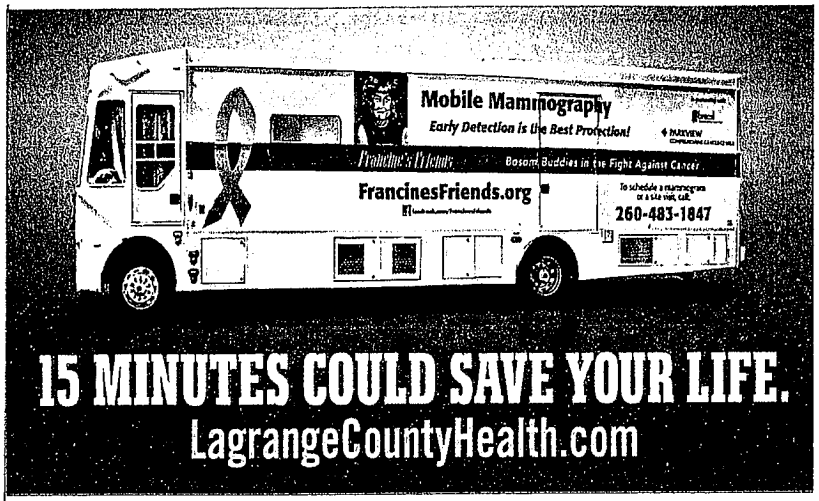
	2013	2014	2015	2016	2017	19-YEAR AVERAGE
1. SOILS EVALUATIONS	182	160	230	210	**235**	261
2. SEPTIC PERMIT INTERVIEWS	164	162	192	173	**201**	203
3. SEPTICS FINAL INSPECTIONS	136	143	163	208	**182**	202
4. TECHNICAL ASSISTANCE	614	503	479	466	**436**	409
5. COMPLAINTS:						
5a. VISITS	6	5	7	2	**2**	30
5b. LETTERS	1	4	8	2	**6**	9
5c. E-MAIL	10	13	22	23	**22**	18
6. MEETINGS:						
PLAT COMMITTEE	13	20	23	24	**24**	21
STATE HEALTH DPT.	2	2	4	9	**6**	7
OTHER (IEHA, ETC.)	23	30	51	41	**51**	32
TOTAL	38	52	78	74	**81**	61
7. MILES:						
7a. DRIVEN	11512	12234	11993	11762	**11250**	10262
8. BUILDING APPLICATION REVIEW	42	32	51	53	**52**	381
9. OTHER:						
PLAT/ZONING FILES	104	129	151	114	**134**	137

SUBMITTED BY:

Dr. Alfredo García, PhD.
Administrator/Environmentalist
LaGrange County Health Department
www.lagrangecountyhealth.com

Office (260) 499-4182 Ext 7
Fax (260) 499-4189
agarcia@lagrangecounty.org

09-Jan-2018



TO SCHEDULE APPOINTMENT: (260) 483-1847 & (800) 727-8439 ext. 26540

BREAST CANCER: BEST PROTECTION IS EARLY DETECTION!!!...

Breast cancer will affect an average of one in seven women during their lifetime and is the second most common cause of cancer-related deaths in women.

Regular screenings is good way to keep your health in check. Cancer screenings help to save lives as mammograms can find cancer before symptoms are present. Diagnostic mammography is used when an abnormality is found during screening or in women who have breast complaints, such as a breast mass, nipple discharge, and breast pain or

Please note: For women without insurance, a high deductible or resources to pay, funding ($$$) is available

IMMUNIZATIONS::LAGRANGE COUNTY HEALTH DEPARTMENT (260) 499-4182 Extension 1		
LaGrange Clinic	**Shipshewana Clinic**	**Topeka Clinic**
LaGrange County Health Department	Wolfe Building Community Room	Topeka Fire Station
Monday & Wednesday Walk-in Clinics	**Only 1st & 3rd Thursday**	**Only 2nd & 4th Thursday**
Tuesday Appointments	9:00 a.m. – 11:30 a.m.	9:00 a.m. – 11:30 a.m.
8:30 a.m. – 11:00 a.m. & 1:00 p.m. – 3:00 p.m.	1:00 p.m. – 3:00 p.m.	1:00 p.m. – 3:00 p.m.

09/22/2017: **Mobile Clinic 4Vaccines, Eddy Village School (7180 S 075 W, Wolcottville, IN 46795).**

TO SCHEDULE APPOINTMENT: (260) 483-1847 & (800) 727-8439 ext. 26540

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Let's All Work To FIGHT DRUG ABUSE

VOLUME 41

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LET'S ALL WORK TO FIGHT DRUG ABUSE
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Thank you for supporting the

LA GRANGE COUNTY SHERIFF'S OFFICE

2017 Drug and Safety Education Program

Your support makes a difference in our community.
Only by working together can we hope to stop drug abuse.

10

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CERTIFICATE OF ACHIEVEMENT

AWARDED TO

Alfredo Garcia

FOR COMPLETING

Sexual Violence Awareness & Prevention e-Learning

COMPLETION DATE	SCORE
November 1, 2017	100%

10

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AWARDED TO

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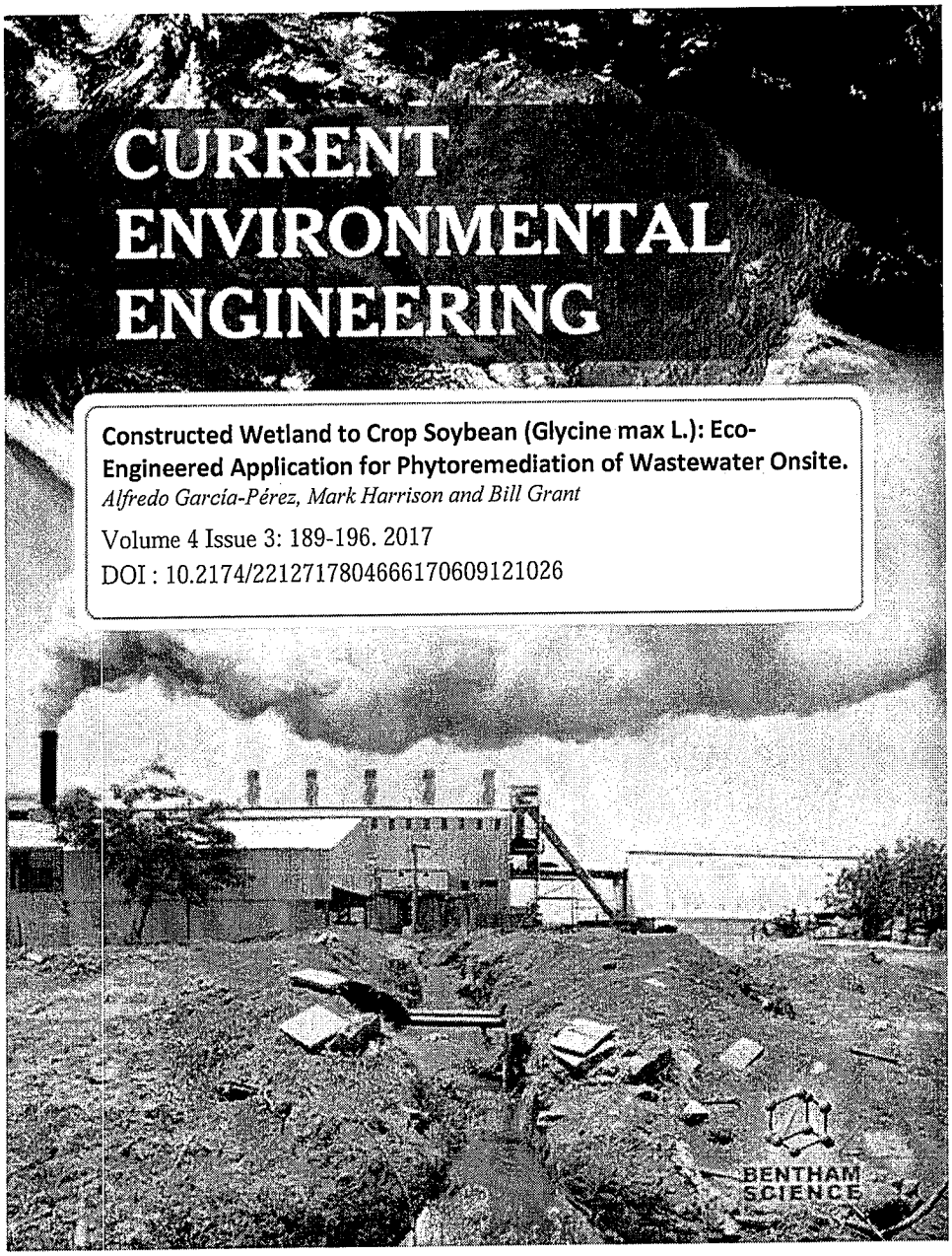
FOR COMPLETING

Bloodborne Pathogens e-Learning

COMPLETION DATE	SCORE
July 10, 2017	100%

11



Constructed Wetland to Crop Soybean (Glycine max L.): Eco-Engineered Application for Phytoremediation of Wastewater Onsite.

Alfredo García-Pérez, Mark Harrison and Bill Grant

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Current Environmental Engineering, 2017, 4, 000-000

RESEARCH ARTICLE

Constructed Wetland to Crop Soybean (*Glycine max* L.): Eco-Engineered Application for Phytoremediation of Wastewater Onsite.

Alfredo García-Pérez[1*], PhD, Mark Harrison[2] and PE, Bill Grant[3]

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ARTICLE HISTORY

Received: November 08, 2016
Revised: March 03, 2017
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DOI:
10.2174/2212717804666170609121026

Abstract: ***Background:*** Chemical fertilizers used for field crops have three main macronutrients components: nitrogen, phosphorus and potassium. They are the limiting factor to plant growth. Effluents from treated wastewater have appropriate concentration levels of those macronutrients to support crop production.

Aim: The main purposes of this pilot case field study were: (i) to recover the valuable nutrients from sewage using a recirculating vertical flow constructed wetland planted on top with soybean (*Glycine max*, L.); (ii) to determine the potential of growing renewable feedstock commodities irrigated with treated effluent as a phytoremediation mechanism to clean wastewater onsite.

Method: Grab samples of effluents from both septic tank and the constructed wetland were analyzed for water quality variables.

Result: Mean treatment efficiencies (removal) were high for biochemical oxygen demand (98%), ammonium-nitrogen (97%), total suspended solids (96%), total Kjeldahl nitrogen (95%), fecal coliforms (93%), total nitrogen (85%), and total phosphorus (77%), while it was relatively low for potassium (43%). Supplementary irrigation or commercial fertilizers were not added during the growing season. The mean yield ± standard deviation (seed mean weight ± standard deviation) for fresh dried weight of soybeans crop was equivalent to 2,625 ± 1,653 kg/ha (0.21 ± 0.05 g/bean).

Conclusion: These results show that soybean growing on top of a recirculating vertical flow constructed wetland could be a sustainable alternative technology and a green mechanism to remove pollutants (nutrients) from sewage. Also, nutrients recovery through direct reuse of treated sewage effluents as source of fertilizers and water to grow first-generation biofuels commodities such as soybean is feasible.

Keywords: Commodities, constructed wetland, *Glycine max*, nutrients, sewage, soybeans, water reclamation.

1. INTRODUCTION

Constructed wetlands are considered a viable green alternative to remove not only conventional pollutants from septic tank effluents [1-3], but also emergent pollutants such as drug residuals, hormones, and personal care products [3]. The treatment performed by constructed wetlands using recirculating vertical flow can reach over 99% removal efficiency for typical contaminants before land application and above surface or underground effluent discharges. Septic waste and effluents from treated domestic wastewater are considered appropriated to support crop production [4, 5]. Subsurface irrigation of corn plants with pre-treated sewage effluent, recycled nutrients as fertilizers, and reclaimed wastewater producing corn (*Zea mays*, L.) with no adverse effects on microbial content or change in nutrient composition in comparison with expected standard [6]. Also, sweet peppers (*Capsicum annuus*, L.) have been grown using wastewater treated by constructed wetlands [7].

Domestic wastewater is rich enough in phosphorus compounds that this macronutrient is not considered a limiting factor in sewage effluents [8]. Annually, the total treated global municipal wastewater contains the equivalent of 25% of the nitrogen and 15% of the phosphorus applied as chemical fertilizers. That is enough water to irrigate 15% of all currently irrigated land [9]. In other words, the nutrient requirements for the soybean crop could be provided on a subsurface constructed wetland treating and reusing sewage effluent

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2212-7178/17 $58.00+.00

13

onsite. Also, it could be a mechanism to reduce pressure for underground water supplies as the sewage can provide the necessary water to maintain irrigation of the crop. The main purposes of this pilot case field study were: (i) to recover the valuable nutrients from sewage using a recirculating vertical flow constructed wetland (RFVCW) planted on top with soybean (*Glycine max*, L.); (ii) to determine the potential of growing renewable feedstock commodities irrigated with treated effluent as a phytoremediation mechanism to clean wastewater onsite.

2. MATERIALS AND METHOD

Two RVFCW (6 m x 6 m; 1.2 m deep) built in LaGrange County, northeastern Indiana, USA were used as part of a replicated case study conducted during the crop growing seasons of 2014 and 2015. The RVFCW systems received typical household sewage, and were completely operational. Each of the two wastewater treatment systems (Fig. **1**) were designed to treat 1,700 liters per day of sewage, and the main components included two septic tanks (4,732 liters each one) pretreating the sewage (48-hour detention time) before feeding the constructed wetland. The outlet of the septic tank held a plastic filter. Sewage passing the filter was gradually released by gravity to the bottom inlet of the wetland cell, which used plastic chambers to spread the incoming effluent at the front end. The wetland cell was built with a 0.762 mm PVC liner and filled with two stone layers of 610 mm depth each one: a bottom layer of 13-25 mm diameter stone and a top layer of 4 mm diameter gravel ("pea gravel"). The two layers were separated by a second PVC liner extended over most of the top surface area of the bottom gravel layer leaving the 25% nearest the wetland inlet uncovered (Fig. **2**). A detailed physical description including pictures of a RVFCW installation has already been published [10]. The LaGrange County Health Department **(http://www.lagrangecountyhealth.com/Pages/Constructedwetlands.aspx)** has general information, photos, guidelines for installation, recommended plants, education material, research references, and a manual for the operation and maintenance of constructed wetlands to treat sewage onsite.

Effluent from the constructed wetland was collected in a sump basin chamber. The basin has a double function as it can be used for the adjustment of the RVFCW water level, if necessary, and is also housing one 1/3 horse power submersible pump. The effluent pump runs with a timer to recirculated effluent back to the top of the wetland. A concrete layer was placed under the bottom of the basin to seal the tile and act as the footer for the pump. This process should prevent the entry of ground water and the seepage of effluent into the surrounding ground. Treated effluent was discharged to an absorption field for final disposal.

During five minutes for each 30-minute interval of the whole operation period, the wetland effluent collected in the basin chamber was recycled back to the RVFCW using a 25.4-mm PVC manifold pipe located over the entire top of the pea gravel bed area [11]. The manifold and perforated lateral distribution lines were covered completely by pea gravel. The effluent that passed through the top

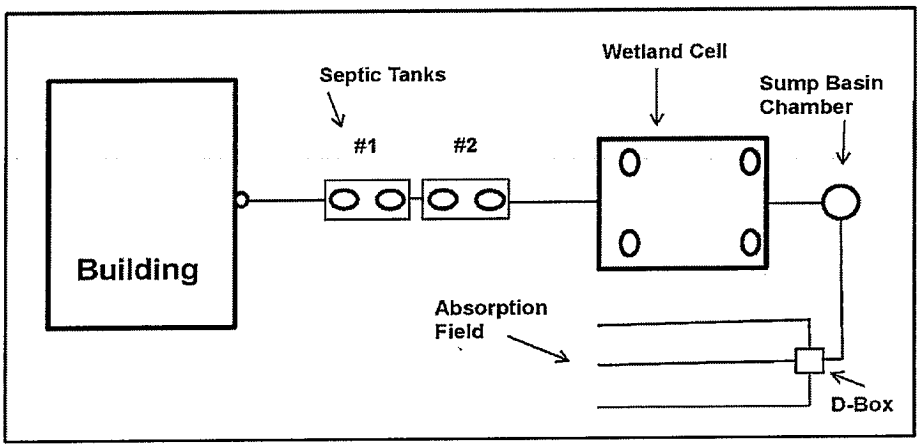

Fig. (1). Schematic showing components of the onsite wastewater treatment system.

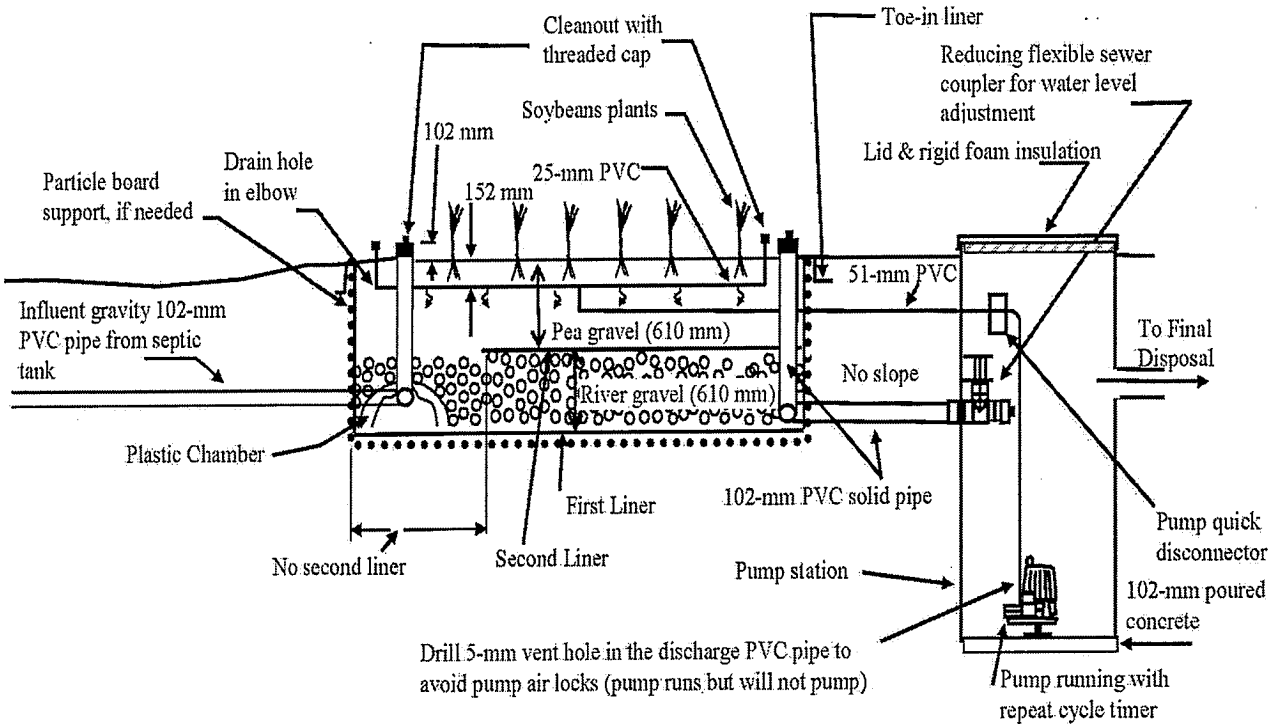

Fig. (2). Longitudinal section of the RVFCW planted with soybean (Glycine max L.).

layer of the wetland, as well as the effluent from the septic tank passing horizontally across the bottom layer of gravel, drained back to the recirculating chamber. Each recirculating pump (Model N151-A, Zoeller Pump Company, Louisville, KY, USA) with a maximum flow of 189 l min-1 was controlled by an electronic repeat cycle timer (Model H3CR-F8, Omron, Novi, MI, USA). The system was designed to allow only the soybean plants' roots to be in contact with treated wastewater: the effluent was drip irrigated 152 mm below the top surface of the pea gravel.

Late May, seeds of soybean (*Glycine max* L.) were planted symmetrically over the entire top of the pea gravel on each one of the two RVFCW at an equivalent density rate of 60,000 and 200,000 plants/ha for the growing crop season of 2014, and 2015; respectively. The mean final growing density was reduced after 92 ± 5% seed germination. During the normal template growing season (May to November), pesticides, herbicides or fertilizers were not added to the crop, nor was there irrigation to provide additional watering. A water balance measuring rainfall, infiltration and evapotranspiration was not determined; however, after any rainy day, a 48-hour holding period was implemented before the samples were collected for testing.

Grab samples of both effluents, septic tank and the RVFCW were collected and periodically submitted to an Environmental Protection Agency (EPA) certified testing laboratory. The samples were analyzed using the methodology described in Standard Methods for the Examination of Water and Wastewater [12], and in the EPA Manual of Methods for Chemical Analysis of Water and Wastes [13]. The growing season ran from May to November. Effluent samplings were carried out in the first weeks of June, July, August, September, October and November for the following parameters: biochemical oxygen demand (BOD5, SM-5210-B)), nitrate (NO-3-N, EPA-353.2), ammonia-N (NH+4-N, SM-4500-NH3), TSS (SM-2540); fecal coliforms bacteria (*Escherichia coli*, SM-Quanti-Tray/2000), total phosphorus (TP, SM-4500-P), potassium (K, EPA-200.7), and total Kjeldahl nitrogen (TKN, EPA-351.2). Total phosphorus (TP) is all of the phosphorus present in the sample regardless of form (organic, inorganic and hydrolysable). TKN is defined as the sum of the free NH+4-N and organic nitrogen compounds. Total-N (TN) was calculated by the combination

of TKN and NO-3-N. Parameters collected on-site at the constructed wetland outlet sump basin included temperature (air and water), dissolved oxygen, and pH. The removal efficiency was calculated according to the equation used by Ebeling *et al.* [14].

The soybean crop was allowed to dry onsite. Late spring (third week of November), all soybean plants from each RVFCW were harvested, counted, and weighed in lots to determine final yield. A subsample of soybean plants was collected and analyzed. Pods from individual plants were manually removed from the stems and counted. Each pod was also manually opened to determine number of seeds and weight. The seeds were counted and weighed on bulk.

3. RESULTS AND DISCUSSION

The removal efficiency fluctuated during the soybean crop growing season. Table **1** presents data of treatment performance for typical water quality parameters. In this case study, the removal efficiency for BOD_5 (98%), ammonia (97%), TSS (96%), TKN (95%), and fecal coliforms (93%) were high as expected. Data is consistent with typical values observed on this type of onsite sewage treatment using a RVFCW. The values are related to the high dissolved oxygen concentration reached within the filter bed. Our results are similar to the data review for applications of constructed wetlands reported by Zhang *et al.* [1].

The demand for nutrients by soybeans is not as great as for corn, with nitrogen usually the first limiting component for yield. Soybeans are relatively highly efficient in the use of macronutrients with a big portion of them being stored as biomass (beans), which could be an important mechanism not only to remove pollutants from wastewater but also as an important process to recover valuable nutrients from sewage. Unlike corn, wheat, and most other commodities harvested worldwide, soybeans are able to obtain their own nitrogen (N) through the process of N-fixation, and so less N is needed in the crop's fertilizer program. The soybean is a legume and if properly inoculated, can use the nitrogen-gas (N_2) from the atmosphere for plant growth. Therefore, nitrogen fertilizer is not needed for soybean production in most situations; however, the use of fertilizer-N can increase yields when producers have experienced problems in getting good "nodulation" (the process of forming especially root nodules containing N-fixation bacteria). Traditionally, soybeans can grow success-

Table 1. Water quality parameters.

Water quality parameters	Residential Sewage**	Recirculating Vertical Flow Constructed Wetland					
(*:mg l^{-1})	Effluent (range)	Influent		Effluent		Efficiency (%)	
		Cell #1	Cell #2	Cell #1	Cell #2	Cell #1	Cell #2
Biochemical Oxygen Demand*	46-476	125	139	1.5	2.2	98.8	98.4
Ammonia-Nitrogen*	4-82	68	54	1.6	1.5	97.6	97.2
Total Kjeldahl Nitrogen (TKN)*	19-93	73	57	2.7	3.6	96.3	93.7
Total Suspended Solids*	38-374	45	41	1.9	1.8	95.8	95.6
Fecal Coliform (Org 100ml^{-1})	10^5-10^8	$1.3X10^6$	$5.4X10^5$	$8.1X10^4$	$4.2X10^4$	93.8	92.2
Total-Nitrogen (TN=TKN+NO_3^--N)*	26-96	74	58	7.9	11	89.3	81.1
Total Phosphorus*	6-17	8.5	6.3	1.6	1.7	81.2	73.1
Potassium*	18-57	30	24	17	14	43	42
Nitrate (NO_3^--N)*	0-2	0.5	0.5	5.2	7.4	NA	NA
Dissolved Oxygen*	0.16-1.8	1.6	1.9	4.6	4.1	NA	NA
pH (standard units)	6.5-9.0	7-8.1	6.9-7.5	7.1-7.7	7-7.5	NA	NA
Water Temperature (°C)	10.4-31.1	15.9	15.7	15.8	15.6	NA	NA

**: [6]. NA: not applicable.

fully without addition of N fertilizer, but recommendations often in the range of 50 to 75 kg/ha and sometimes higher may be beneficial to maximize potential yields [15].

Unlike nitrogen, soybean plants get most of their phosphorus from the surrounding soil. Potassium is also an essential component of fertilizer mixes to promote fruiting in the plant and helps to maintain good resistance to diseases and infections. Phosphate and potassium fertilizer guidelines for soybean production are dependent of those nutrients available on the soil and the desired specific expected yield. The suggested rates of phosphate vary between 75 to 225 kg/ha, and for potassium from 38 to 275 kg/ha [15].

Comparative to sunflower crops that have low resistance to drought by using a lot of water to maintain optimum level plant moisture, soybean plants are relatively drought-tolerant but respond well to irrigation. Different reports [15, 16] have shown that yield potential of irrigated soybeans can be nearly double the dryland yield, and that the crop responds well to irrigation during later growth stages where water stress may lead to a decrease in yield. The total water used by a fully irrigated soybean crop fluctuates from 50 to 70 cm during the full growing season [16]. In our case study, it seem like the normal requirements of water and nutrients were provided in the subsurface RVFCW allowing the soybeans to have sustainable above-ground biomass production as expected, producing flowers with formed fruits ("pods") reaching full maturity (Fig. **3**). This normal growing process of the soybean plants treated, reused and contributed to the processes that clean sewage effluent onsite. Clean treated effluent was discharged to the leach field during the research period, but the quantity discharged was not measured.

The nitrification process is typical of RVFCWs, and it is related to the high dissolved oxygen concentration showing a high level of performance for contaminants removal: ammonia (mean value) was reduced from 61 mg/L in the inlet to 1.55 mg/L in the outlet (97.5% removal), however nitrate increase from 0.5 mg/L (inlet) to 6.3 mg/L (outlet). Treated effluent with a good amount of nitrate is important if the reclamation of the treated sewage is intended for crop production. The report by

Fig. (3). Growing cycle of soybean (*Glycine max L.*) planted on top of the RVFCW treating sewage onside.

Wallace and Knight [17] indicates that the nitrogen uptake by typical wetland plants is usually less than 10%; however studies done by Zurita *et al.* [18], planting commercial-valuable ornamental flowering species on top of a constructed wetland indicate clearly that the nitrogen available in the treated sewage effluent can be incorporated into the plant biomass.

Regarding phosphorus removal, our case study using the RVFCW to grow soybeans showed results completely opposite to studies using typical constructed wetland plants. Those systems have shown that phosphorus removal through conventional constructed wetland plants is very low and usually does not exceed 5%. Eventually, in mature systems, the phosphorus removal rarely exceeds 20% [19]. Also, harvesting the typical constructed wetland plants is generally an insignificant process to remove phosphorus [17]; however, a RVFCW treating both human and animal sewage reached 33% phosphorus removal efficiency using flowering plants [20]. A relatively high value of 76% efficiency for P-removal using sunflower plants has been reported [21], suggesting by the authors that the process responsible to remove the phosphorus could be the sunflower plants sequestering the nutrient (phosphorus) in the aboveground biomass to produce the flower heads. Phosphorus is an important nutritional element during the growing season, and helps plants to mature efficiently and to reach flowering stage. Another study [22] indicated that P-removal in CWs occurs via adsorption and precipitation within the wetland substrate, in combination with microbial and plant uptake by keeping conventional constructed wetland plants in the growth phase. This is usually done by regular and continuous harvesting of the biomass. The latter approach achieved 61% of total phosphorus removal, but that number drops to 3% if the plants are maintained in a steady growth phase without any seasonal harvesting [23]. The combination of a specially selected substrate and seasonal harvesting, using ornamental flower plants, showed 50% P-removal efficiency [18]. This case study shows that the P-removal reached 81% (mean value=77%). This could be an indication that the typical micro biota which normally inhabits the aggregate could have minimal contribution to the phosphorus removal if there is another mechanism competing for the ready to use available phosphorus.

After Nitrogen, the next higher required nutrient element for plant growth is potassium (K). Typically, this element is available in septic waste to fulfill requirements of crops to reach maturity production [6]. Potassium removal by conventional and typical constructed wetland plants (*Phragmites and Phalaris*) is low (<11%) as reported by different studies [24, 25, 26]; however, K-removal up to 49% has been reported planting corn on top of a RVFCW [11]. Our study using soybeans reached an efficiency of 43% K-removal.

The success reached with this project shows the potential of using sewage onsite to produce primary commodities: soybeans in this case. Also, this field study is a contribution to the recently developed concept in which water recycling and nutrient conservation can be the new standard for future wastewater treatment systems. Sewage nutrients in constructed wetlands have the potential to be used as alternative technology to grow primary feedstock for the generation of renewable biomass with potential economic value such as processing as biofuel, biomass for green energy generation, or to feed domestic animals.

The feedstock model to treat wastewater onsite as a mechanism to grow commodity crops such as soybean is an interesting concept to continue improving and developing as an eco-engineering alternative of sewage treatment. It uses very low energy input and recycles nutrients to reduce the degradation of surface water, thereby preventing potential contamination of drinking water supplies. This approach supports food production, harvesting nutrients out of the water and copying the natural wetlands properties to clean wastewater onsite.

CONCLUSION

This study is another example of an eco-engineering system to treat sewage onsite. With this green approach, sewage becomes a beneficial product with positive economic, environmental and public health implications rather than a problem asset full of pollutants to be treated and disposed. The environmental-friendly technology used in this study converted sewage into a valuable product (soybean) and disposed high quality final effluent. The soybeans could be post-harvested and processed to be exploited as biomass pelletization to feed animals or as fuel pellets, among other benefits. This field case study shows that CWs fit perfectly into the feedstock or commodity production system model without reducing efficiency to clean wastewater, or affecting

crop yield. Finally, the direct reusing of treated sewage as a source of water and fertilizers (nutrient recovery) to grow first-generation of biofuel commodities, such as soybeans, is technically feasible.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

HUMAN AND ANIMAL RIGHTS

No Animals/Humans were used for studies that are base of this research.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The author (editor) declares no conflict of interest, financial or otherwise.

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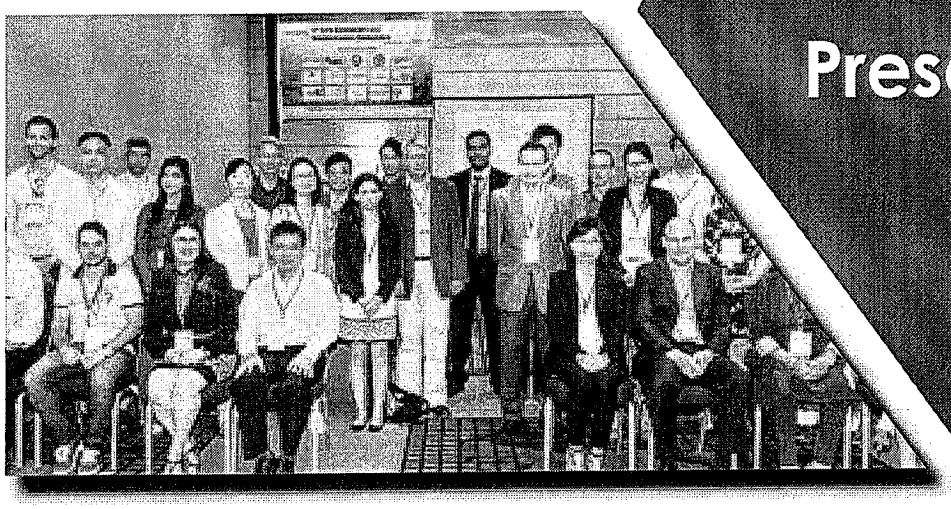

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A constructed wetland to recycling sewage onsite as an engineered ecosystem for a sustainable biomass crop production of commodities.

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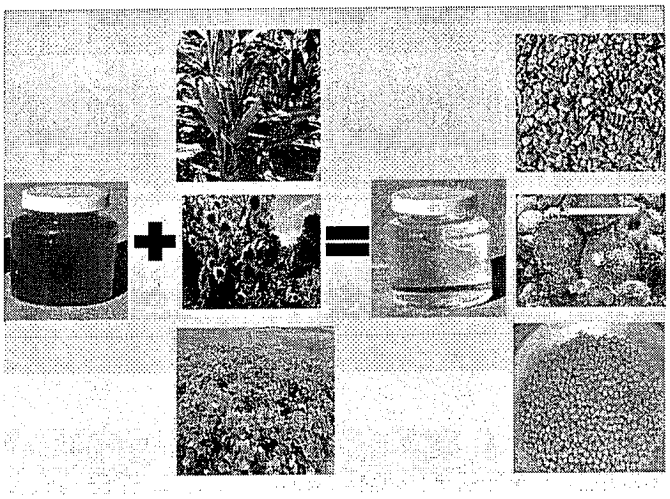
[2]*KCI Technologies Inc. 6983 Corporate Circle, Indianapolis, Indiana 46278 USA.*

Abstract

Primary feedstock for alternative energy production (biomass conversion) is coming from commodities such as corn, soybean, sunflower, and sugarcane; which are main sources of food for humans and animals. Chemical fertilizers used to improve cultivated crops have three main macronutrients: nitrogen, phosphorus and potassium. They are the limiting factor to plant growth because of their relative scarcity and irreplaceable value. Septic tank effluents ("sewage") can be chemically considered one of the richest and most productive waters. Sewage is rich in nitrogen (5-7%) and phosphorus (3-5%), and in constructed wetlands; which are considered a viable green alternative to remove conventional and emergent contaminants from sewage, could be reclaimed as fertilizers. The feasibility of growing cultivated crop commodities (corn, soybean, sunflower) on top of a recirculating vertical flow constructed wetland (RVFCW) treating sewage on-site is reported. The RVFCW released an effluent up to 99% free of fecal coliform bacteria. Also, the treatment efficiencies (mean removal for the three cultivated crops) were high for biochemical oxygen demand (98%), total suspended solids (95%), ammonium-nitrogen (96%), total Kjeldahl nitrogen (95%), total nitrogen (81%), and total phosphorus (76%). The crop efficiency to remove potassium fluctuated from a relatively low for sunflower (38%), intermediate for corn (49%) to a high value of 77% for soybean. The crop yield of sunflower seeds was not calculated, but all the plants reached maturity and produced sunflower heads. The fresh dried weight of soybean (only beans) and corn (only kernel) was equivalent to 2,625 and 10,026 kg/ha, respectively. Production data and the good quality of the final effluent confirm that a RVFCW is a sustainable alternative technology to removing pollutants from wastewater. Also, the recycling of sewage effluent as a source of fertilizers (nutrients recovery), and water reclamation to grow first-generation of biofuel commodities is technically feasible. An economic impact study was not included.



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2. http://www.lagrangecountyhealth.com/Pages/ConstructedWetlands.aspx, 2017.
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5. Constructed wetlands for agricultural wastewater treatment in Northeastern North America: A review. Water 2016 (8): 173-187.

Biography

*Dr. García-Pérez has been working with the LaGrange County Health Department-Indiana for the last 18 years as the administrator and also as the environmental health specialist in charge of the onsite wastewater program focusing on constructed wetlands technology. His approach has been concentrated to offer a green alternative to conventional septic systems to treat wastewater onsite as a green mechanism to protect groundwater drinking supplies from sewage contamination. He has tried different pathways to improve the appealing of constructed wetlands as garden systems and also as a mechanism to recycling nutrients to grow commodities. He developed an educational webpage providing a lot of information regarding constructed wetlands to treat sewage onsite. He has also been involved in aquaculture, water quality research, and environmental projects in Colombia, Puerto Rico and USA.

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Notes:

A Constructed Wetland to Recycling Sewage Onsite as an Engineered Ecosystem for a Sustainable Biomass Crop Production of Commodities

Alfredo García-Pérez*, Mark Harrison** & Bill Grant*
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Primary feedstock for alternative energy production (biomass conversion) is coming from commodities such as corn, soybean, sunflower, and sugarcane, which are main sources of food for humans and animals. Chemical fertilizers used to improve cultivated crops have three main macronutrients: nitrogen, phosphorus and potassium. They are the limiting factor to plant growth because of their relative scarcity and irreplaceable value. Septic tank effluents ("sewage") can be chemically considered one of the richest and most productive waters. Sewage is rich in nitrogen (5-7%) and phosphorus (3-5%), and in constructed wetlands; which are considered a viable green alternative to remove conventional and emergent contaminants from sewage, could be reclaimed as fertilizers. The feasibility of growing cultivated crop commodities (corn, soybean, sunflower) on top of a recirculating vertical flow constructed wetland (RVFCW) treating sewage on-site is reported. The RVFCW released an effluent up to 99% free of fecal coliform bacteria. Also, the treatment efficiencies (mean removal for the three cultivated crops) were high for biochemical oxygen demand (98%), total suspended solids (95%), ammonium-nitrogen (96%), total Kjeldahl nitrogen (95%), total nitrogen (81%), and total phosphorus (76%). The crop efficiency to remove potassium fluctuated from a relatively low for sunflower (38%), intermediate for corn (49%) to a high value of 77% for soybean. The crop yield of sunflower seeds was not calculated, but all the plants reached maturity and produced sunflower heads. The fresh dried weight of soybean (only beans) and corn (only kernel) was equivalent to 2,625 and 10,026 kg/ha, respectively. Production data and the good quality of the final effluent confirm that a RVFCW is a sustainable alternative technology to removing pollutants from wastewater. Also, the recycling of sewage effluent as a source of fertilizers (nutrients recovery), and water reclamation to grow first-generation of biofuel commodities is technically feasible. An economic impact study was not included.

This poster presents the findings of the feasibility to grow commodities on top of a recirculating vertical flow constructed wetland treating sewage effluent on site.

Introduction

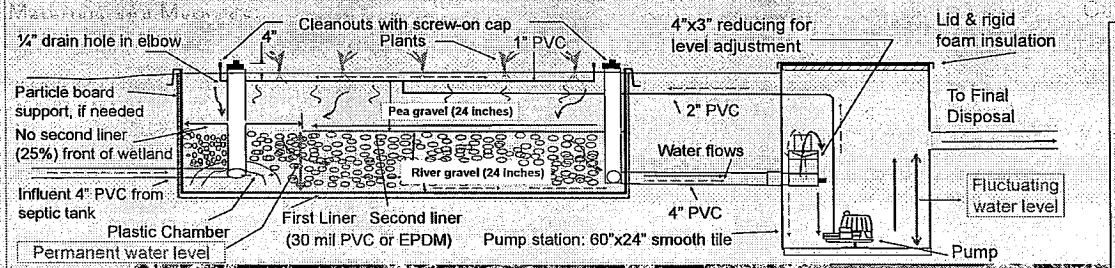
Sewage= septic tank effluent

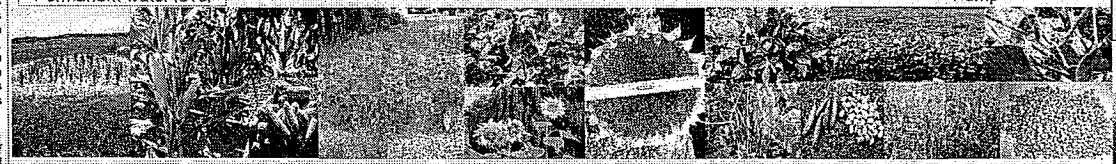
- Chemically "fertilizers"
- Valuable raw material: N-P-K & H_2O
- corn, soybean, sunflower= biofuel commodities
- Biomass conversion= alternative green energy production

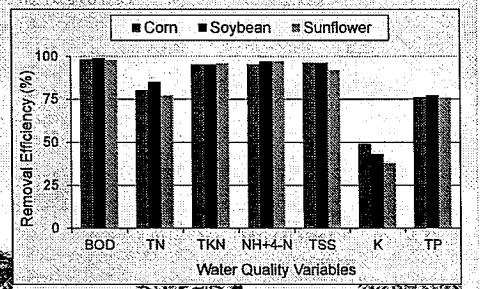
Constructed wetlands= Engineering green technology

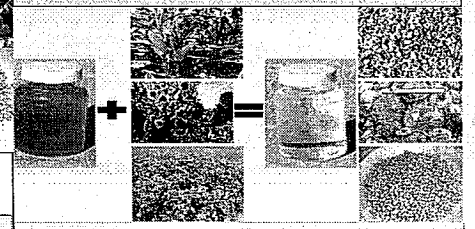
- Environmental friendly technology as passive system-low energy consumption
- Highly efficient removing contaminants from sewage
- Harvesting vegetation improves treatment performance

Materials and Methods

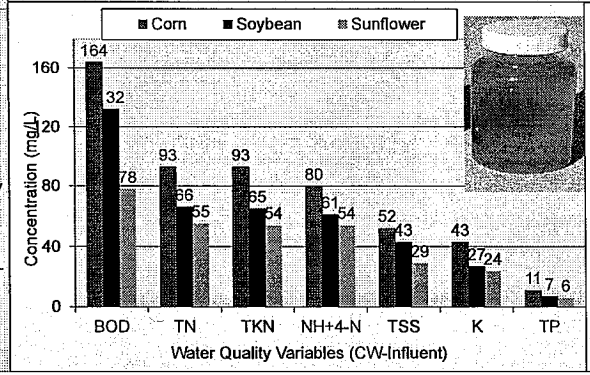


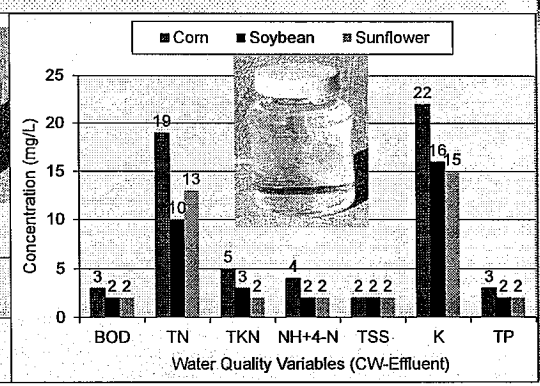






Results





Recent Publications

Constructed wetland to crop soybean (*Glycine max*, L.): Eco-Engineered application for phytoremediation of wastewater onsite. Current Environmental Engineering 4 (3):189-196, 2017.

Constructed Wetland in LaGrange County, Indiana. Educational website, 2017. http://www.lagrangecountyhealth.com/Pages/ConstructedWetlands.aspx.

Sunflowers (*Helianthus annuus*, L.) on top of a constructed wetland as an engineered ecosystem to clean sewage onsite. Open J. of Water Pollution and Treatment 1 (2): 83-91, 2014.

Microbial analysis and chemical composition of corn (*Zea mays*, *L.*) growing on a recirculating vertical flow constructed wetland treating sewage on-site. Biosystems Engineering 114 (3): 351-356, 2013.

Constructed wetlands for agricultural wastewater treatment in Northeastern North America: A review. Water 2016 (8): 173-187.

Acknowledgements

Thank you to the LaGrange County Health Department Board for the support. Also, funding for this project was provided by the LaGrange County Health Department, and the Indiana State Department of Health.

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26

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Certificate

Conference Series and the Editors of Expert Opinion on Environmental Biology, International Journal of Waste Resources and Journal of Environmental & Analytical Toxicology wish to thank

Prof./Dr./Mr./Ms. **Alfredo García-Pérez**

LaGrange County Health Department-Indiana, USA

for his E-Poster Participation
at the "6th International Conference on Recycling: Reduce, Reuse and Recycle"
held during November 06-08, 2017 in Las Vegas, USA

Babu Joseph
University of South Florida & T2C-Energy, LLC., USA

182

NORTHEAST INDIANA

Positive RESOURCE CONNECTION™

Providing HIV Education, Prevention, Testing and Linkage to Care.

Free Hepatitis C &/Or HIV Testing Screening

County of LaGrange Health Board

304 N. Townline Rd., LaGrange, IN 46761

2017 dates

3/22, 6/28, 9/27, 12/29

11:00 AM to 1:30 PM

Confidential Testing

RESULTS IN 20 MINUTES

Questions? Call: 260-744-1144

Indiana State Department of Health

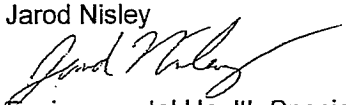
The Health Foundation of Greater Indianapolis Inc

ANNUAL FOOD ACTIVITIES REPORT 2017

ACTIVITIES	January	February	March	April	May	June	July	August	September	October	November	December	**Total**
Restaurant Inspections	12	21	26	33	46	28	41	30	26	21	23	16	323
Bed & Breakfast Inspections	0	0	1	0	0	1	0	0	0	2	0	1	5
Locker Plant Inspections	0	0	1	0	1	0	0	0	2	0	0	1	5
Courtesy Inspections	7	3	0	5	0	3	0	2	4	2	1	3	30
Water Sampling	0	3	2	5	11	6	2	3	8	2	4	7	53
Complaints	0	2	0	1	0	2	0	0	1	1	2	1	10
Consultations	23	28	25	37	35	27	25	19	28	27	21	14	309
Reinspections	5	2	9	0	0	2	3	1	0	4	2	1	29
Emergency Situations	0	0	0	0	0	0	0	0	1	0	0	0	1
Plan Submission Review	8	3	1	6	1	11	0	1	3	4	6	5	49
Letters	2	2	0	0	1	0	0	0	0	0	0	0	5
Meetings	2	3	2	1	2	1	2	1	2	1	2	2	21
Total Miles Driven	1034	750	1409	1074	1452	1119	792	1079	927	1199	1022	798	12655
Meth Labs	1	1	1	0	0	0	0	0	0	0	0	0	3
Pool Inspections	3	3	2	0	0	1	7	5	2	0	2	0	25

Submitted by:

Jarod Nisley



Environmental Health Specialist

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday January 19, 2017

Moose Lake Christian Craft Village
11330 E 500 S
LaOtto, IN Noble County

9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 11:00 Scott Gilliam – Meijer Manager Food Safety Policy and Training "Corporate Food Safety"

11:00 – 11:15 Break

11:15 – 12:00 PERF – Public Employee Retirement Fund (Tentative)

12:00 – 1:00 Lunch

1:00 - ? Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the Room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday February 16, 2017

Mad Anthony's Lakeview Ale House and Reception Hall
4080 N 300 W
Angola, IN Steuben County

9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 11:00 Kristine Hawkins – IDEM Drinking Water Branch Permits Section "Cross Connections and Backflow Prevention in Food Establishments and Others"

11:00 – 11:15 Break

11:15 – 12:00 Joe Williams - IDEM Section Chief Confined Feeding Operations

12:00 – 1:00 Lunch

1:00 - ? Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the Room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday March 16, 2017

The Fried Egg
1319 N. Cass
Wabash, IN Wabash County

9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 11:00 John Scheiber – U.S. Army Corps of Engineers Salamonie Lake Project Manager "Flowage Easements / Harmful Algal Blooms, Blue-Green Algae

11:00 – 11:15 Break

11:15 – 12:00 Jamie Noble – Indiana State Board of Animal Health (BOAH) "Poultry Processing Regulations: Recent Updates"

12:00 – 1:00 Lunch

1:00 - ? Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the Room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday April 20, 2017

Riverside Café 706 S. State St. (S.R. 5/14), South Whitley, IN Wastewater Treatment Plant 600 S. Main St.,
And then Collamer Bridge and Dam on the Eel River at River Road and 900 West intersection 1/8 mile south of S.R. 14 and 2 miles west of South Whitley, IN Whitley County

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9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 11:00 Jim Corridan – Director and State Archivist, Indiana Archives and Records Administration "Record Retention in Local Health Departments"

11:00 – 11:15 Break

11:15 – 11:45 Kent Slater – Wastewater Operator / Crew Leader South Whitley, Indiana Utilities Department "Presentation and Tour"

11:45 – 12:45 Lunch **Riverside Café <u>does</u> accept credit cards**

12:45 – ? Business Meeting, then Tour of the South Whitley Wastewater Treatment Plant, then .....

<u>Adopt-A-River Clean-up Project</u>

Bring: boots, raingear, gloves, trash poker, 5 gallon bucket, insect repellent, and drinks. Bring a boat if desired.

Scott Wagner and Whitley County Solid Waste Management District are taking care of rubbish removal.
Contact Rob De Beck's cell phone if you get lost: 317-431-5343 (cell phone reception is sometimes problematic in the area).

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday May 18, 2017

Pizza Hut
632 N. Main St. (State Road 1)
Bluffton, IN Wells County

9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 11:00 Mike Miller – Program Director ISDH Division of Weights, Measures, and Metrology

11:00 – 11:15 Break

11:15 – 12:00 Tess Gorden, MPH and Madhura Sundararajan, MPH – ISDH Enteric Epidemiologists Infectious Disease Epidemiology "Outbreak Investigation Collaborations: Epidemiology and Environmental Health"

12:00 – 1:00 Lunch

1:00 - ? Business Meeting

Members are requested to stay at the meeting site for lunch so that the room is not charged to the Chapter.

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday September 21, 2017

The Galley
622 N 13th St. (U.S. 27 North)
Decatur, IN Adams County

9:00 – 10:00	Coffee, Donuts, & Healthy Alternative
10:00 – 12:00	Public Health Issues – Old Order Amish community Sewage Disposal, Food Protection, Complaints, and Public Health Nursing Roundtable discussion moderated by Sharon Pattee, ISDH Food Protection Program and Alice Quinn, Supervisor ISDH Residential On-Site Sewage Disposal System Program
12:00 – 1:00	Lunch
1:00 - ?	Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the Room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday October 19, 2017

Pickle Lounge
1776 Independence Parkway
Hartford City, IN Blackford County

9:00 – 10:00	Coffee, Donuts, & Healthy Alternative
10:00 – 11:00	Jennifer Scott and Rich Mofield – Environmental Health Specialist and Environmental Food Specialist Wabash County Health Department "Digital Health Department Inspection Software for On-Site Sewage Disposal and Food Protection"
11:00 – 11:15	Break
11:15 – 12:00	Pastor Troy Kaufman – Celebrate Recovery "Addiction Recovery and Public Health Challenges"
12:00 – 1:00	Lunch
1:00 - ?	Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Members are requested to stay at the meeting site for lunch so that the Room is not charged to the chapter.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday November 16, 2017

DeKalb County Building
Red Room (Basement)
215 E. 9th St.
Auburn, IN DeKalb County

9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 10:30 Spencer Mize – The Summit Director of Strategic Initiative

10:30 – 11:00 Ryan Smith – Owner Fork and Fiddle Mobile Food Truck

11:00 – 11:15 Break

11:15 – 12:00 Stan Smith – Protechs, Inc. Stera-Mist Outbreak Control and Fire, Water, Mold Remediation"

12:00 – 1:00 Lunch (hopefully as a group at a nearby restaurant)

1:00 - ? Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

I.E.H.A. NORTHEAST CHAPTER
MEETING

Thursday December 21, 2017

Elkhart County Administration Building & Green Cow Power
117 N. 2nd St. and then 24130 CR 40 Goshen, IN Elkhart County

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9:00 – 10:00 Coffee, Donuts, & Healthy Alternative

10:00 – 10:45 Lucio Ternieden – Chief Field Inspections Section Drinking Water Branch OWQ-IDEM "Non-Community Water Supplies in Food Service and other Establishments"

10:45 Leave for tour of Green Cow Power

11:00 – 12:00 Tour of Green Cow Power Andy Sloat Green Cow Power Operations Manager "Converting Dairy Manure, Food Processing Waste, and Biodiesel Waste into Electricity and Hot Water"

12:00 – 1:00 Lunch at a nearby restaurant hopefully as a group

1:00 - ? Business Meeting

PLEASE MAKE SURE THAT ALL IEHA MEMBERS IN YOUR OFFICE RECEIVE A COPY OF THIS NOTICE.

Indiana State Dept. of Health
and
Elkhart County Health Department

Public Health Pest Seminar
February 8, 2017
4230 Elkhart Rd.
Goshen, IN

9:00 am	Bed Bug Biology, Avoidance and Control	**Doug Ginder, ISDH**
10:00 am	Ticks and Tick Borne Disease in Indiana	**Bryan Price, ISDH**
11:00 am	Zika Virus	**Lee Green, ISDH**
12:00 pm	Lunch	
1:00 pm	2016 ISDH Vector-borne Disease Update	**Bryan Price, ISDH**
1:30 pm	Fleas: Biology and Control	**Doug Ginder, ISDH**
2:00 pm	Cockroaches	**Jeanette McGavic, ISDH**
2:30 pm	Pesticide Safety and PPE	**Lee Green, ISDH**
3:15 pm	Mosquito Larvicides and Collection	**Jeanette McGavic, ISDH**
4:00 pm	Closing Remarks	

THIS IS TO CERIFY THAT

Jared Nisley

IS HEREBY PRESENTED THIS CERTIFICATE OF ACHIEVEMENT FOR COMPLETION OF THIS PUBLIC HEALTH MOSQUITO CONTROL WORKSHOP.

3/2/2017	Fort Wayne
Training Date	Training Location

Christopher T. Novak

Signature of Clarke Control Consultant

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10

Jarod Nisley

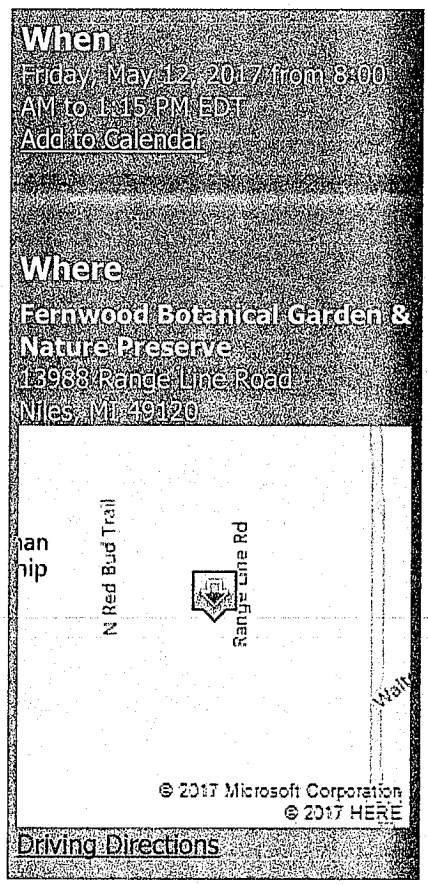
From: St. Joseph River Basin Commission <basindirector@macog.com>
Sent: Wednesday, May 03, 2017 9:59 AM
To: Jarod Nisley
Subject: Important Message for Registrants: St. Joseph River Basin Symposium

Having trouble viewing this email? Click here
Hi, you're receiving this email because your work has an impact on the St. Joseph River or you have expressed an interest in the watershed. Don't forget to add BasinDirector@macog.com to your address book so we'll be sure to land in your inbox!

You may unsubscribe if you no longer wish to receive our emails.

St. Joseph River Basin Commission

17th Annual Indiana Michigan St. Joseph River Basin Symposium



Dear Jarod,

Thank you for registering for the St. Joseph River Basin Symposium **next Friday May 12th** at Fernwood. With only a few spots left and final numbers due this Friday, I want to ensure we aren't turning people away or paying for meals that aren't necessary, so **please let me know if you are unable to make it.**

The year's Symposium will be a great opportunity to learn more about water quality initiatives and network with water resource professionals from both Indiana and Michigan. Please **arrive between 8:00 and 8:30 for registration** and a continental breakfast sponsored by the *Michiana Area Council of Governments*. This year's "River Basin Roundup" will include short presentations from:

- Adam Bowden, *St. Joseph County (IN) Public Works*
- Jason Kauffman, *City of Goshen Stormwater Dept.*
- Janel Meyer, *Steuben County SWCD*
- Grant Poole, *Pokagon Band of Potawatomi*
- Eleanor Serocki, *Van Buren Conservation District*
- Sheila Wald, *Branch Conservation District*

Lunch will be provided around noon by the *Friends of the St. Joe River Association* following Jim Selegean's presentation on "Sediment Transport in the St. Joseph River Basin". Dress is casual and you are welcome to enjoy a self-guided tour of the gardens at Fernwood following the Symposium.

41

St. Joseph River Basin Commission

Second Quarter Meeting

Thursday, June 1, 2017
10:00 a.m.
Elkhart County Public Services Building
4230 Elkhart Road
Goshen, IN 46526

AGENDA

- CALL TO ORDER
- ROLL CALL
- APPROVAL OF MINUTES – March 2, 2016
- FINANCIALS
  - Financial Report
  - Approval of Claims
- OLD BUSINESS
  - Basin Updates—Basin Commission Members
  - Cobus Creek Watershed Diagnostic Study
  - GLPF Conservation Incentive Project
  - Great Lakes Day – Washington, DC
  - 17th Annual SJRB Symposium
- NEW BUSINESS
  - Local Government Contribution Requests
  - FY2018 Work Plan
  - Contract for Services – Legal Counsel
  - Directors & Officers Insurance Policy
  - Contract for Services – MACOG
  - Fiscal Officer Resolution
  - Internal Control Standards Resolution
  - FY2018 Budget Adoption
- PRESENTATION – Alicia Czarnecki, 2017 IWLA Scholarship Winner
- ITEMS FROM THE FLOOR
- CALL FOR ADJOURNMENT

Next Meeting: Thursday, September 7, 2017—Elkhart County Public Services Building

St. Joseph River Basin Commission

Third Quarter Meeting

Thursday, September 7, 2017
10:00 a.m.
Elkhart County Public Services Building
4230 Elkhart Road
Goshen, IN 46526

AGENDA

- CALL TO ORDER
- ROLL CALL
- APPROVAL OF MINUTES – June 1, 2017
- FINANCIALS
  - Financial Report
  - Approval of Claims
- OLD BUSINESS
  - Basin Updates—Basin Commission Members
  - GLPF Conservation Incentive Project
  - Directors & Officers Insurance Policy
  - Local Government Contribution Requests
- NEW BUSINESS
  - Indiana Watershed Leadership Academy Scholarship
  - 2018 Meeting Dates
  - Noble County/West Lakes Support
  - 2018 Symposium Location
  - Water Monitoring Program Final Report
  - INAFSM Conference
- ITEMS FROM THE FLOOR
- CALL FOR ADJOURNMENT

Next Meeting: Thursday, December 7, 2017—Elkhart County Public Services Building

Vital Statistics Report
Births 2015, 2016, 2017

2015

BIRTHS	MALE	FEMALE	TOTALS
J	33	25	58
F	37	38	75
M	44	38	82
A	40	42	82
M	38	34	72
J	22	31	53
JUL	45	40	85
A	38	27	65
S	28	36	64
O	29	26	55
N	25	37	62
D	34	29	63
TOTAL	413	403	816

2016

BIRTHS	MALE	FEMALE	TOTALS
J	37	21	58
F	42	32	74
M	29	33	62
A	43	25	68
M	29	29	58
J	36	30	66
JUL	24	34	58
A	31	31	62
S	24	31	55
O	30	25	55
N	41	31	72
D	35	29	64
TOTAL	401	351	752

2018

BIRTHS	MALE	FEMALE	TOTALS
J	25	31	56
F	33	31	64
M	34	34	68
A	31	28	59
M	30	30	60
J	29	20	49
JUL	29	38	67
A	45	28	73
S	30	24	54
O	37	24	61
N	23	29	52
D	32	31	63
TOTAL	378	348	726

2015

	J	F	M	A	M	J	JUL	A	S	O	N	D	
NEW EDEN CARE	40	44	44	48	42	39	56	42	42	33	41	41	512
PARKVIEW LAGRANGE	14	25	28	25	24	8	24	19	17	15	17	19	235
HOME	4	6	10	9	6	6	5	4	5	7	3	4	69
TOTAL	58	75	82	82	72	53	85	65	64	55	61	64	816

2016

	J	F	M	A	M	J	JUL	A	S	O	N	D	
NEW EDEN CARE	35	48	34	46	32	39	36	39	35	34	34	37	449
PARKVIEW LAGRANGE	14	20	23	18	22	21	16	19	15	16	30	24	238
HOME	9	8	3	4	4	6	6	4	5	5	4	7	65
													0
TOTAL	58	76	60	68	58	66	58	62	55	55	68	68	752

2017

	J	F	M	A	M	J	JUL	A	S	O	N	D	
NEW EDEN CARE	33	34	40	39	38	33	42	43	24	36	32	38	432
PARKVIEW LAGRANGE	15	22	14	9	14	14	16	20	25	15	18	16	198
HOME	9	7	14	11	8	2	9	11	4	10	2	9	96
													0
TOTAL	57	63	68	59	60	49	67	74	53	61	52	63	726

Respectfully Submitted: Kelly Bills

IE

Vital Statistics Report

Deaths 2015, 2016, 2017

2015

DEATHS	MALE	FEMALE	FETAL		
J	10	14		0	
F	8	12		0	
M	8	12		1	
A	8	4		2	
M	13	13		1	
J	8	8		1	
JUL	7	14		1	
A	8	10		1	
S	11	7		0	
O	10	10		1	
N	10	10		0	
D	8	7		1	
TOTAL	109	121	230	9	239

2016

DEATHS	MALE	FEMALE	FETAL DEATHS		
J	12	5		1	
F	10	3		0	
M	10	10		0	
A	9	7		1	
M	6	2		0	
J	4	7		0	
JUL	13	12		0	
A	9	6		0	
S	8	7		0	
O	12	4		0	
N	13	8		0	
D	5	9		0	
TOTAL	111	80	191	2	193

2017

DEATHS	MALE	FEMALE	TOTAL	FETAL	
J	7	8	15	0	
F	11	12	23	0	
M	12	6	18	0	
A	15	5	20	0	
M	8	9	17	0	
J	12	11	23	0	
JUL	17	7	24	0	
A	8	9	17	0	
S	7	8	15	0	
O	9	7	16	0	
N	12	9	21	0	
D	7	4	11		
TOTAL	125	95	220	0	220

Respectfully Submitted: Kelly Bills

CANCER RELATED DEATHS 2017

*on both lists

Total #	FILE#	%	AGE	CAUSE OF DEATH	SMOKER
1	1	100%	71	Acute Cardiopulmonary Arrest, Chronic Obstructive Pulmonary	UNK
				Disease - Severe, Cerebral Palsy	
2	2	100%	80	Metastatic Ovarian Cancer, Ovarian Cancer	NO
3	4	75%	88	Lymphoma Mouth Origin Local Extension, End Stage Dementia	UNK
				Alzheimer Type, Cerebral Infarction, Hypertension	
4	17	24%	44	Tonsillar Cancer with Metastases to the Brain	YES
5	20	25%	84	Congestive Heart Failure Secondary to Severe Aortic Stenosis, Lung	UNK
				Cancer, Non Small Cell 0 Stage IIIA, COPD, Hypertension	
6	25	24%	56	Metastatic Breast Cancer	NO
7	30	23%	85	Pulmonary Fibrosis, Hypertension, Gastroesophageal Reflux Disease,	NO
				Osteoarthritis, History of Squamous Cell Carcinoma	
8	31	26%	73	Cancer of the Tongue, AML, COPD, Hypertension, Iron	YES
				Defiency Anemai	
9	36	25%	73	Lung Cancer	PROB
10	37	27%	92	Adult Failure to Thrive, Alzheimers Dementia, Hypertension, Renal	NO
				Mass, Gastroesophageal Reflux, History of Breast Cancer, Chronic	
				Kidney Disease Stage III	
11	38	29%	78	Mantle Cell Lymphoma	UNK
12	42	29%	61	Medullary Carcinoma of the Thyroid, Gastroesophageal	PROB
				Reflux Disease, Benign Prostateic Hypertrophy	
13	43	30%	80	Squamous Cell Carcinoma of the Lip Metastatic Diffusely	NO
14	46	30%	73	Metastatic Cancer	NO
15	55	27%	47	Cardiopulmonary Arrest, Metastatic Adenocancer of the Colon	NO
				Bowel Obstruction	
16	57	28%	90	Pneumonia, Aspiration, Unrinary Tract Infection, Chronic	UNK
				Atrial Fibrillation, History Prostate Cancer, Failure to Thrive	
17	59	29%	80	Cardiorespiratory Arrest, Metastatic Abdominal Cancer	UNK
18	60	30%	41	Cancer of the Vertebra Spine, Unspecified Site Metastatic Cancer	NO
19	61	31%	82	Lung Adenocarcinoma Metastatic to the Brain	NO
20	63	32%	73	Hepatic Encephalopathy, Hepatic Failure, Gall Bladder Cancer	NO
				w/Hepatic & Peripancreatic Nodal Metastatic Disease	
21	64	33%	72	Cardiorespiratory Arrest, Renal Cell Cancer w/Metastasis	UNK
22	67	33%	66	Adenocarcinoma Pancreas, Metastatic	NO
23	75	31%	77	Respiratory Failure, End Stage Parkinson Disease, Multiple	NO
				Myeloma, Hypertension, Coronary Artery Disease	
24	79	30%	69	Adenocarcinoma of the Esophagus with Metastases to Bone	YES
				Hypertension	
25	82	30%	60	Cardiorespiratory Arrest, Rectal Cancer with Liver Metastasis	UNK
26	86	30%	50	Uterine Carcinoma Sarcoma, Metastatic	NO
27	87	31%	68	Pancreatric Carcinoma Metastatic to the Liver	NO
28	107	26%	50	Metastatic Breast Cancer, Cancer of Ovaries, Uterus and	NO
				Lymphnodes metastatic from breast	
29	109	27%	91	Congested Heart Failure, Lung Cancer Metastasized	UNK
				to Lung and Bone	
30	111	27%	73	Carcinoma of the Breast with Metastatic Disease to	NO
				the Liver, Bone and Lung	
31	112	28%	92	Metastatic Carcinoma of the Cecum Unknown Cell Type, Adv. Dementia	UNK
32	121	26%	87	Alzheimers Dementia, CAD, HTN, Prostate Cancer	NO
33	123	27%	76	Hemothorax, Diffuse Large B Cell Lymphoma, Adenocarcinoma of the	NO
				Ascending Colon Not Metastasized, Spinal Cord Injury w/paraplegia 20 yrs ago	
34	128	27%	82	Metastatic Lobular Breast Cancer, Renal Insufficiency	NO
35	129	27%	76	Tongue Cancer with Metastasis to Lymph	YES
36	130	28%	73	Small Cell Carcinoma of Right Lung, Acute Renal Failure, Gastro-	YES
				esophageal Reflux, Osteoporosis, Hyperlipidemia	
37	138	27%	66	Hepatic Encephalopathy, Metastatic Hepatocellular	NO
				Carcinoma with Metastatic Disease to Peritoneum	
38	139	27%	70	Non-Small Cell Lung Cance rwith Metastases to Liver, Throat Cancer,	YES
				COPD, Seizure Disorder, Myocardial Infarction, Coronary Artery Disease	
				Hyperlipidemia	

39	147	27%	41	Pancreatic Cancer	YES
40	148	27%	59	Melanoma with metastases to liver, bone and spleen	PROB
41	149	28%	98	Chronic End Stage Heart Failure, Hypertensive Cardiomyopathy,	NO
				Locally Metastatic Squamous Cell Carcinoma of Vulva, Chronic	
				Kidney Disease, Hypertension, Spinal Stenosis	
42	154	27%	84	Prostate Cancer, COPD, CHF	PROB
43	155	28%	92	Metastatic Cancer of the Breast, Congestive Heart Failure-Diastolic	UNK
				COPD, Hypertension, Chronic Kidney Disease	
44	156	28%	68	B-Cell Lymphoma, Sepsis, Small Bowel Obstruction	UNK
45	158	28%	67	Metastatic Pancreatic Poorly Differentiated Adenocarcinoma,	NO
				Benign Prostatic Hypertrophy with Obstruction - surgically corrected	
46	163	28%	75	Metastatic Kidney Carcinoma to the Brain, Bone & Chest, Chronic Kidney	UNK
				Disease, Hypertension, Gastroesophageal Reflux Disease, Seizures	
				Hemiplegia, Pathologic Rib Fractures	
47	166	28%	73	Severe Peripheral Vascular Disease, Diabetes Type 2 uncontrolled, Anemia	YES
				of Chronic Kidney Disease Stage III, Prostate Cancer History, Hypertension,	
				Hyperlipidemia, GERD, Depression, Hypothyroid, Proteinuria	
48	169	28%	68	Pancreatic Adenocarcinoma Metastatic to Lungs & Liver	NO
49	170	29%	84	Bronochogenic Lung Cancer - No tissue diagnosis	PROB
50	173	29%	70	B-Cell Lymphoma	NO
50	174	29%	76	Metastatic Brain Carcinoma, Lung Carcinoma-Unknown Type	YES
51	184	28%	63	Metaplastic Carcinoma of Breast with Bond and Pulmonary Metastases	NO
				Spinal Cord Compression	
52	187	28%	79	Cancer of the Tongue and Throat, COPD, Ischemic Heart Disease	YES
53	191	28%	78	Probable Prostate Adenocarcinoma Metastatic to Spine	NO
54	192	28%	83	Metastatic Urothelial Carcinoma, Left Hemispheric Stroke	NO
				Coronary Artery Disease	
55	196	28%	85	Acute Sepsis from Abdominal Source, History of Rectovaginal Fistula, Merkel	NO
				Cell Carcinoma of the Face, Rheumatoid Arthritis, Weakness, Hypertension, CAD	
56	198	28%	70	Acute Myeloblastic Leukemia, Acute Myeloid Leukemia	UNK
57	200	29%	89	Liver Cancer, Chronic Hepatitis C	NO
28	202	14%	66	Carcinoma of the Lung with Brain Metastasis	PROB
29	203	14%	74	Melanoma Metastatic to the Brain	NO
30	212	14%	78	Myelodysplastic Syndrome, Venous Thromboembolic Disease, Pancytopenia	NO
				Adult Failure to Thrive	

(Cancer Related Deaths)

Total #	FILE#	%	AGE	HEART RELATED - CAUSE OF DEATH *on both lists	SMOKER
1	3	33%	81	Cardiac Arrest/Ventricular Fibrillation, Presumed Acute Coronary	PROB
				Syndrome, Hypertension, Type 2 Diabetes Mellitus, Hyperlipidemia	
2	7	29%	74	Cardiac Arrhythmia, Congestive Heart Failure	NO
3	8	38%	69	Fatal Cardiac Arrhythmia	NO
4	9	44%	84	Aortic Dissection, Hypothyroidism, Hypertension	NO
5	12	42%	83	COPD, Coronary Artery Disease	UNK
6	14	43%	90	Acute Cardiopulmonary Arrest, Hypertension, End Stage	UNK
				Dementia, Dementia Unspecified, Depression, Osteoporosis	
7	16	44%	91	Heart Failure, Unknown	NO
8	18	44%	54	Cardiac Arrhythmia	PROB
9	20	45%	84	Congestive Heart Failure Secondary to Severe Aortic Stenosis, Lung	UNK
				Cancer, Non Small Cell 0 Stage IIIA, COPD, Hypertension	
10	22	45%	53	Acute Myocardial Infarction, Ischemic Cardiomyopathy, Diabetes	YES
				Mellitus Type II, Morbid Obesity	
11	23	48%	68	Cardiopulmonary Arrest, Severe Sleep Apnea, Morbid Obesity	NO
12	26	46%	74	Cadiac Arrhythmia, Second Degree AV Block, Hypertension	NO
				Rheumatoid Arthritis	
13	27	48%	87	CAD, Ischemic Cardiomyopathy, Chronic Atrial Fibrillation	NO
				Alzheimers Dementia, Chronic Kidney Disease	
14	33	42%	79	Acute Cardiopulmnary arrest, Acute Viral Gastroenteritis, Cerebral	UNK
				Vascular Infarction-Small, Dementia, Chronic Kidney Disease, Hypertension	
15	34	44%	84	End Stage Congestive Heart Failure with Reduced Ejection Fraction,	NO
				Coronary Artery Disease, Type 2 Diabetes Mellitus, Dementia, Hypertension	
16	35	46%	80	Cardiopulmonary Arrest, Congestive Heart Failure	NO
17	39	44%	83	Congestive Heart Failure, Chronic Kidney Disease Stage 3, Diabetes	UNK
				Mellitus Type 2, Coronary Artery Disease, Status Post Pacemaker Implantation	
18	40	45%	89	Alzheimers Type Dementia, Hypertension, Congestive Heart Failure,	UNK
				Aortic Valvular Disease, Renal Insufficienty, Anemia, Osteoarthritis, Osteopenia	
19	41	46%	87	Fatal Cardiac Arrhythmia, Gunshot Wound to the Head	NO
20	44	45%	93	Congestive Heart Failure, Chronic Kidney Disease Stage 3,	UNK
				Coronary Artery Disease	
21	51	41%	93	Cardiorespiratory Arrest, Pneumonia, Congestive Heart Failure	NO
22	52	42%	87	Cardiorespiratory Arrest, Pneumonia, Sepsis	NO
23	53	43%	59	Coronary Thrombosis due to severe Coronary Atherosclerosis	NO
				Hypertensive Heart Disease	
24	55	44%	47	Cardiopulmonary Arrest, Metastatic Adenocancer of the Colon	NO
				Bowel Obstruction	
25	56	45%	90	Cardiorespiratory Arrest, Pneumonia, Sepsis	NO
26	58	45%	93	Chronic Systolic Congestive Heart Failure	NO
27	59	46%	80	Cardiorespiratory Arrest, Metastatic Abdominal Cancer	UNK
28	65	43%	74	Fatal Cardiac Arrhythmia	NO
29	66	44%	78	End Stage Congestive Heart Failure, Coronary artery Disease	YES
				COPD Severe, Hypertension, Type 2 Diabetes Mellitus	
30	68	44%	88	Sudden Cardiac Death, Congestive Cardiomyopathy,	UNK
				Atherosclerosis	
31	69	45%	59	Fatal Cardiac Arrhythmia	UNK
32	71	45%	68	Cardiac Arrhythmia, Hypertension, Diabetes, COPD and CHF	UNK
33	72	46%	94	Acute Myocardial Infarction, Sepsis of Undetermined Etiology	UNK
				End Stage Dementia	
34	73	47%	39	Fatal Cardiac, Asphyxia Due to Ligature, Fracture of C& Vertebra	NO
35	74	47%	81	Fatal Cardiac Arrhythmia	NO
36	75	48%	77	Respiratory Failure, End Stage Parkinson Disease, Multiple	NO
				Myeloma, Hypertension, Coronary Artery Disease	
37	76	49%	77	Respiratory Failure, Chronic Obstructive Lung Disease	YES
				Chronic Congestive Cardiomyopathy	
38	78	49%	87	Cerebral Hemorrhagic Stroke, Atrial Fibrillation, Coronary	UNK
				Arteriosclerosis, Hypertension	
39	80	49%	95	End Stage Heart Disesae, End Stage Renal Disease, COPD, Alzheimers	YES
				Dementia, History of C Diff infection, Depression, Hypertension, Anemia	
40	81	49%	4	Head Trauma, Neck Trauma - due to accident	NO
41	82	50%	60	Cardiorespiratory Arrest, Rectal Cancer with Liver Metastasis	UNK
42	83	51%	18	Cardiac Arrhythmia, Multi Systems Trauma, Motor Vehicle Accident	NO
43	84	51%	60	Cardiorespiratory Arrest, Cardiac Arrest, Chronic Heart	UNK
				Failure, Nonhealing Diabetic Ulcers	
44	85	52%	74	Fatal Cardiac Arrhythmia	UNK
45	90	50%	87	End Stage Confestive Heart Failure, Chronic Atrial Fibrillation,	UNK
				Chronic Kidney Disease St 4, Type 2 Diabetes, Non Insulin Dependant	
				Osteoporosis, Gastroesophageal Reflux, Hypertension	

Heart Related- Cause of Death

46	91	51%	91	Cardiorespiratory Arrest, Systolic Congestive Heart Failure	UNK
47	93	51%	82	Parkinson Disease, Alzheimer Disease, Hypertension, Heart Failure	UNK
				Unknown, Hyperglycemia	
48	94	51%	86	Peripheral Vascular Disease, Type 2 Diabetes, Hypertension,	NO
				Unspecified Atrial Fibrillation, Sepsis	
49	96	51%	50	Acute Myocardial Infarction, Type 2 Diabetes, Hypertension	NO
				Hyperlipidemia	
50	97	52%	61	Cardiac Arrest, Coronar Artery Disease and Multifactorial Congestive	PROB
				Heart Failure, COPD, Obstructive Sleep Apnea, Diabetes	
51	101	50%	85	Anorexia w/Dehydration, Chronic Congestive Heart Failure Due to	NO
				Valvular Heart Disease, Cerebral Infarction late Sequelae, A-Fib	
52	102	51%	43	Sudden Death Due to Acute Myocardial Infarction, Systemic Lupus	UNK
				Erythematosis, Seizure Disorder, Bipolar Disorder	
53	108	49%	63	Severe Coronary Atherosclerosis, Hypertensive Heart Disease	YES
				Renal Artherosclerosis, Smoker	
53	109	49%	91	Congested Heart Failure, Lung Cancer Metastasized	UNK
				to Lung and Bone	
54	110	49%	70	Acute Myocardial Infarction, Coronary Artery Disease, History of Stroke	YES
				Chronic Kidney Disease St 3, COPD, Hypertension, Hyperlipidemia	
55	115	48%	61	Presumed Cardiac Arrhythmia and Myocardial Infarction, Coronary Artery Disease	YES
56	116	48%	85	Acute Large R Cerebral Infarction, COPD, Generalized Weakness	NO
				Poor Appetite, Gastroesophageal Reflux	
57	118	48%	46	Fatal Cardiac Arrhythmia, Asphyxiation, Hanging, Methamphetamine	NO
58	120	48%	73	COPD, Atrial Fibrillation, Parkinsons	UNK
59	124	48%	64	Lethal Cardiac Dysrhythmia, Diabetes	YES
60	125	48%	90	Renal Failure, Unknown Congested Heart Failure, Coronary Artery Disease	NO
61	132	46%	53	Severe Coronary Atherosclerosis	YES
62	133	47%	71	Congestive Heart Failure, Chronic Kidney Disease, Type 2 Diabetes,	NO
				Alzheimers Disease, Anemia	
63	134	47%	53	Severe Atherosclerosis, Diabetes Mellitus	NO
64	135	47%	102	Pneumonia, Type 2 Diabetes Mellitus, Doronary Artery Disease	NO
65	136	48%	77	Cardiopulmonary Arrest Due to Dehydration, End Stage Late Onset	UNK
				Alzheimers with Anorexia, Alzheimers, COPD	
66	137	48%	74	Cardiopulmonary collapse due to Anorexia, Thrombosis of Inferior Vena Cava, Para-	UNK
				plegia from essential Transection of Upper Lumbar Spinal Cord, Tumor of Spinal Corc	
				undetermined etjiology, unable to be biopsied, Chronic Obstructive Pulmonary Disease	
67	140	48%	63	Cardiac Arrest, Diabetes, Obesity, Sleep Apnea	NO
68	142	48%	71	Cardiac Arrest, Hypertension, Atrial Fibrillation	UNK
69	143	48%	52	Fatal Cardiac Arrythmia, Traumatic Brain Injury, Seizure Disorder	UNK
70	146	48%	74	Presumed Cardiac Arrhythmia, Presumed Myocardial Infarction,	NO
				Coronary Artery Disease, Uncontrolled Diabetes Mellitus, Type 2	
71	152	47%	85	Fatal Cardiac Arrhythmia, Broken Neck C1, Odontoid Fracture	NO
72	153	47%	98	Chronic Congestive Heart Failure, Valvular Heart Disease	NO
73	155	47%	92	Metastatic Cancer of the Breast, Congestive Heart Failure-Diastolic	UNK
				COPD, Hypertension, Chronic Kidney Disease	
74	157	47%	60	Fatal Cardiac Arrhythmia, Cigarette Smoking	YES
75	160	47%	92	Cardiorespiratory Arrest, Systolic/Diastolic Congestive Heart Failure	UNK
76	161	47%	87	Cardiorespiratory Arrest, Sepsis, Aortic Valve Replacement, Gangrene Bilateral Toes	UNK
77	162	48%	83	Acute Renal Failure, COPD, Sepsis, Chronic Systolic Congestive Heart Failure	UNK
78	167	47%	82	Presumed Cardiac Arrhythmia, Coronary Artery Disease	NO
79	168	47%	27	Cardiorespiratory Arrest, Neurofibroma	UNK
80	172	47%	61	Fatal Cardiac Arrhythmia	PROB
81	175	46%	67	Fatal Cardiac Arrythmia due to Multiple Sclerosis	UNK
82	177	46%	86	Acute Cardiorespiratory Arrest, Sepsis from UTI, Acute Renal Failure	NO
83	179	46%	60	Fatal Cardiac Arrythmia	UNK
84	180	47%	56	Fatal Cardiac Arrhythmia, Hypertensive Heart Disease	NO
85	181	47%	63	Congestive Heart Failure, Severe Coronary Atherosclerosis	NO
86	182	47%	86	Chronic Obstructive Pulmonary Disease, Atrial Fibrillation with RVR, Hypertension	YES
				Panlobular Emphysema	
87	183	48%	70	Cardiopulmonary Arrest, End Stage Dementia, unspecified, Dementia Advanced, COPD	UNK
88	185	48%	71	Sudden Cardiac Death, Atherosclerotic Vascular Disease, Insulin Dependent Diabetes Mellitus	NO
89	186	48%	76	Congestive Heart failure, Hypertension	NO
90	187	48%	79	Cancer of the Tongue and Throat, COPD, Ischemic Heart Disease	YES
91	189	48%	75	Respiratory Failure, Cerebrovascular Accident, A-Fib, Diabetes, Dementia	NO
92	193	48%	84	Congestive Heart Failure, Coronary Artery Disease, Aortic Stenosis,	NO
				Hypertension, Elevated Cholesterol	
93	194	48%	87	Unknow Heart Failure, CVA	UNK
94	195	48%	91	Coronary Artery Disease, Respiratory Failure, Hypertension	UNK
95	199	48%	76	Cardiorespiratory Arrest, Intraparenchymal Hemorrhage of the Brain	UNK
96	201	48%	74	Cerbrovascular Accident, Atherosclerotic Vascular Disease	UNK

Heart Related - Cause of Death

97	204	48%	75	Lethal Cardiac Dysrhythmia	YES
98	205	48%	67	Fatal Cardiac Arrythmia, Hypertension	NO
99	206	48%	90	End Stage Vascular Dementia, Chronic A-Fib, Type 2 Diabetes, Hypertension, Hypothyroidism	UNK
100	207	48%	40	Fatal Cardiac Arrhythmia, Severe Pulmonary Edema, Coronary Atherosclerosis	NO
101	209	48%	75	End Stage Biventricular Heart Failure, Chronic OPD-Advanced, Coronary Artery Disease	PROB
				Hypertension, Type 2 Diabetes Mellitus	
102	210	49%	90	Chronic Diastolic Heart Failure, Sepsis, Alzheimers Dementia, A-Fib, Type II Diabetes,	YES
				Hypertension, Hyperlipidemia, Hypothyroidism, Stage III Chronic Kidney Disease	
103	211	49%	88	Cardiorespiratory Arrest, Coronary Artery Disease, Dementia	NO
104	214	49%	96	Chronic Cardiovascular Disease, Aortic Stenosis, Hyperlipidemia, Hypertension,	YES
				Gastroesophageal Reflux, Benign Prostatic Hypertrophy	
105	215	49%	95	Cardiorespiratory Arrest, Adult Failure to Thrive, Chronic Kidney Disease, UTI	NO
106	216	49%	73	Fatal Cardiac Arrhythmia, Cardiac Arrest	UNK
107	217	49%	90	End Stage Congestive Heart Failure Biventricular, Chronic Kidney Disease Stage 4,	UNK
				Hypertension, Alzheimers Dementia	
108	218	50%	88	Fatal Cardiac Arrhythmia	UNK

OTHER SIGNIFICANT CAUSES OF DEATH 2017

SUICIDE

Total #	FILE#	%	AGE	HEART - CAUSE OF DEATH *on both lists	SMOKER
1	1	100%	71	Acute Cardiopulmonary Arrest, Chronic Obstructive Pulmonary	UNK
				Disease - Severe, Cerebral Palsy	
2	5	40%	0	Fetal Anolamy, Trisomy 13 or 18	NO
3	6	50%	81	Cerebrovascular Accident	NO
4	10	40%	92	Sepsis Undetermined Origin, Acute Kidney Failure upon Chronic Kidney	UNK
				Failure Class 5, Type 2 Diabetes, Hypertension, Autonomic Dysfunction	
5	11	45%	79	Chronic Respiratory Failure, End Stage COPD	YES
6	13	46%	81	Cerebrovascular Accident	UNK
7	15	47%	30	Self Inflicted Gunshot Wound to the Head, Depression	NO
8	21	38%	89	Presumed Community Acquired Pneumonia	NO
9	24	38%	77	Chronic Obstructive Lung Disease, Mixed Dementia	YES
10	28	36%	63	Respiratory Failure, COPD, Aspergillosis, Malnutrition	YES
11	29	38%	82	End Stage Chronic Obstructive Pulmnoary Disease, Hypertension, Type 2	UNK
				Diabetes, Pulmonary Hypertension, Anxiety, Depression, Osteoarthritis	
12	30	40%	85	Pulmonary Fibrosis, Hypertension, Gastroesophageal Reflux Disease,	NO
				Osteoarthritis, History of Squamous Cell Carcinoma	
13	32	41%	88	Intracerebral Hemorrhage	UNK
14	39	36%	83	Congestive Heart Failure, Chronic Kidney Disease Stage 3, Diabetes	UNK
				Mellitus Type 2, Coronary Artery Disease, Status Post Pacemaker Implantation	
15	41	37%	87	Fatal Cardiac Arrhythmia, Gunshot Wound to the Head	NO
16	45	36%	79	Pneumonia, COPD, Chronic Kidney Disease, Stage 4, Dementia	UNK
				Unspecified w/behaviors, End Stage, Benign Prostatic Hypertrophy	
17	49	35%	83	Respiratory Failure, COPD	NO
18	50	36%	54	Asphyxia Due to Drowning	UNK
19	54	35%	2 mos	Hirschsprungs Disease	NO
20	70	29%	84	Acute Renal Failure, Obstructive Uropathy, Urinary Tract Infect.	NO
21	75	28%	77	Respiratory Failure, End Stage Parkinson Disease, Multiple	NO
				Myeloma, Hypertension, Coronary Artery Disease	
22	77	29%	95	Alzheimers Type Dementia, Chronic Kidney Disease St 4, Adult	UNK
				Failure to Thrive, Hypothyroidism	
23	78	29%	87	Cerebral Hemorrhagic Stroke, Atrial Fibrillation, Coronary	UNK
				Arteriosclerosis, Hypertension	
24	88	27%	85	Chronic Obstructive Pulmonary Disease End Stage	YES
				Hypertension, Chronic Atrial Fibrillation	
25	89	28%	77	Blunt Force Trauma, Motor Vehicle Accident	NO
26	92	28%	88	Dementia Due to Cerebrovascular Disease, Cerebrovascular Accident	UNK
27	93	29%	82	Parkinson Disease, Alzheimer Disease, Hypertension, Heart Failure	UNK
				Unknown, Hyperglycemia	
28	94	30%	86	Peripheral Vascular Disease, Type 2 Diabetes, Hypertension,	NO
				Unspecified Atrial Fibrillation, Sepsis	
29	95	31%	81	Alzheimers Dementia	NO
30	98	31%	74	Chronic Renal Failure, Hypertension, Diabetes Mellitus Type 2	NO
31	104	30%	77	End Stage Interstitial Lung Disease-Idiopathic, Hypertension, 2 diabetes	NO
32	105	30%	81	Dehydration, End Stage Alzheimer Dementia, Hypertension	NO
33	106	31%	3/29/1900	Respiratory Failure, Carcinoma of Gall Bladder	NO
34	110	31%	70	Acute Myocardial Infarction, Coronary Artery Disease, History of Stroke	YES
				Chronic Kidney Disease St 3, COPD, Hypertension, Hyperlipidemia	
34	113	30%	96	Dementia of Mixed Type, Chronic Obstructive Lung Disease	PROB
35	114	31%	18	Cardiac Arrhythmia, Due to Motorcycle Accident	NO
36	117	31%	66	Multiple Blunt Trauman Injuries, Motor Vehicle Accident, Alcohol	UNK
				Fracture & Dislocation of C2, Transection of Cervical Cord, laceration/	
				maceration of Lungs, Heart, Liver, Aorta and Spleen	
37	118	31%	46	Fatal Cardiac Arrhythmia, Asphyxiation, Hanging, Methamphetamine	NO
38	119	32%	75	Pneumonia	NO
39	120	33%	73	COPD, Atrial Fibrillation, Parkinsons	UNK
40	121	33%	87	Alzheimers Dementia, CAD, HTN, Prostate Cancer	NO
41	122	34%	83	Acute Pneumonia, COPD, Chronic Asthma, Type 2 Diabetes, Hypertension	NO
				Dementia Alzheimer Type, Neuropathy, Depression	
42	125	34%	56	Pulmonary Fibrosis	UNK
43	126	34%	28	Massive Retroperitoneal Hemorrhage	NO
44	127	35%	46	Fatal Cardiac Arrhythmia, Blunt Force Trauma, Disembowlment,	NO
				Head Injury	
45	130	35%	73	Small Cell Carcinoma of Right Lung, Acute Renal Failure, Gastro-	YES
				esophageal Reflux, Osteoporosis, Hyperlipidemia	
46	133	35%	71	Congestive Heart Failure, Chronic Kidney Disease, Type 2 Diabetes,	NO

Other Significant Causes of Death 2017

				Alzheimers Disease, Anemia	
47	134	35%	53	Severe Atherosclerosis, Diabetes Mellitus	NO
48	135	36%	102	Pneumonia, Type 2 Diabetes Mellitus, Doronary Artery Disease	NO
49	136	36%	77	Cardiopulmonary Arrest Due to Dehydration, End Stage Late Onset	UNK
				Alzheimers with Anorexia, Alzheimers, COPD	
50	140	36%	63	Cardiac Arrest, Diabetes, Obesity, Sleep Apnea	NO
51	141	36%	99	Dehydration from Anorexia, End Stage Alzheimer Dementia, COPD,	UNK
				Chronic Kidney Disease, Hypothyroidism	
52	143	36%	52	Fatal Cardiac Arrythmia, Traumatic Brain Injury, Seizure Disorder	UNK
53	145	37%	86	Acute Myelogenous Leukemia of Blood	NO
54	146	37%	74	Presumed Cardiac Arrhythmia, Presumed Myocardial Infarction,	NO
				Coronary Artery Disease, Uncontrolled Diabetes Mellitus, Type 2	
55	150	37%	94	Cerebrovascular Accident	NO
56	151	37%	41	Blunt Force Trauma, Motor Vehicle Accident	NO
				Blood positive for Methamphetamine, Amphetamine, THC, Nicotine, Cotinine	
57	152	38%	85	Fatal Cardiac Arrhythmia, Broken Neck C1, Odontoid Fracture	NO
58	159	36%	50	Sepsis from presumed Urinary Source, Large Obstructing Kidney Stone, Status	PROB
				post Nephrolithotomy, Cerebrovascular Disease with Large R sided Infarct, Hypertension	
				Ruptured Aneurysm Thoracic, Hirschsprungs Disease, Bilareral Lower Extremity Paralysis	
59	162	36%	83	Acute Renal Failure, COPD, Sepsis, Chronic Systolic Congestive Heart Failure	UNK
60	164	37%	88	Acute Respiratory Failure, Bacterial Pneumonia, Acute Appendicitis, Polymorphic VT,	INK
				Hypertension, S/P Pacemaker, H/O Nodular Histiocytic Lymphoma, Chronic Kidney Disease # 3	
61	165	37%	72	Gangrene Lower Extremity, Peripheral Vascular Disease, Type 2 Diabetes on Insulin	YES
62	166	37%	73	Severe Peripheral Vascular Disease, Diabetes Type 2 uncontrolled, Anemia	YES
				of Chronic Kidney Disease Stage III, Prostate Cancer History, Hypertension,	
				Hyperlipidemia, GERD, Depression, Hypothyroid, Proteinuria	
63	168	38%	27	Cardiorespiratory Arrest, Neurofibroma	UNK
64	171	37%	95	Vascular Dementia, Multiple Episodes of Cerebrovascular Ischemic Events, Hypertension	NO
65	175	37%	67	Fatal Cardiac Arrythmia due to Multiple Sclerosis	UNK
66	176	38%	85	Stroke, Severe Dementia, Severe Anemia	NO
67	178	38%	56	Severe Chronic Obstructive Pulmonary Disease, Osteoporosis, Anxiety, Depression	YES
68	182	37%	86	Chronic Obstructive Pulmonary Disease, Atrial Fibrillation with RVR, Hypertension	YES
				Panlobular Emphysema	
69	183	38%	70	Cardiopulmonary Arrest, End Stage Dementia, unspecified, Dementia Advanced, COPD	UNK
70	185	38%	71	Sudden Cardiac Death, Atherosclerotic Vascular Disease, Insulin Dependent Diabetes Mellitus	NO
71	188	38%	78	Aspiration, Dysphagia, Parkinsonism	NO
72	189	38%	75	Respiratory Failure, Cerebrovascular Accident, A-Fib, Diabetes, Dementia	NO
73	196	37%	85	Acute Sepsis from Abdominal Source, History of Rectovaginal Fistula, Merkel	NO
				Cell Carcinoma of the Face, Rheumatoid Arthritis, Weakness, Hypertension, CAD	
74	197	38%	85	Cor Pulmonale, Chronic Obstructive Lung Disease, Morbid Obesity	YES
75	199	38%	76	Cardiorespiratory Arrest, Intraparenchymal Hemorrhage of the Brain	UNK
76	201	38%	74	Cerbrovascular Accident, Atherosclerotic Vascular Disease	UNK
77	213	36%	82	Massive Cerebral Infarction, Chronic Myelogenous Leukemia, Diabetes	NO
				Mellitus, Long Term Insulin Us, Hypertension, History of Depression	
78	219	36%	91	Alzheimers Dementia	NO
79	220	36%	44	Fatal Cardiac Arrhythmia, Fentanyl Toxicity	UNK
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			Under 59 Years Old	Year Filed 2017	Suicide
#	Local #	Percentage	AGE	CAUSE OF DEATH	SMOKER
1	5	100%	4 hrs	Fetal Anomaly, Trisomy 13 or 18	NO
2	15	13%	30	Self Inflicted Gunshot Wound to the Head, Depression	NO
3	17	18%	44	Tonsillar Cancer with Metastases to the Brain	YES
4	54	7%	2 mos	Hirschsprungs Disease	NO
5	55	9%	47	Cardiopulmonary Arrest, Metastatic Adenocancer of the Colon, Bowl Obstruction	NO
6	73	8%	39	Suicide, Asphyxia Due to Ligature, Fatal Cardiac Arrhythmia, Fracture C7 Vertebra	NO
7	81	9%	4	Head Trauma, Neck Trauma	NO
8	83	10%	18	Cardiac Arrhythmia, Multi Systems Trauma Due to Motor Vehicle Accident	NO
9	102	9%	43	Sudden Death Due to Acute Myocardial Infarction, Systemic Lupus Erythematosis,	UNK
				Seizure Disorder, Bipolar Disorder	
10	114	9%	18	Cardiac Arrhythmia due to Motorcycle Accident	NO
11	118	9%	46	Fatal Cardiac Arrhythmia, Asphyxiation, Hanging, Methamphetamine	NO
12	126	10%	28	Massive Retroperitoneal Hemorrhage - (baby was born same day)	NO
13	127	10%	46	Fatal Cardiac Arrhythmia, Blunt Force Trauma, Disembowlment, Head Injury (motorcycle accident)	NO
14	147	10%	41	Pancreatic Cancer	YES
14	159	9%	50	Sepsis from presumed Urinary Source, Large Obstructing Kidney Stone, Status	PROB
				post Nephrolithotomy, Cerebrovascular Disease with Large R sided Infarct, Hypertension	
				Ruptured Aneurysm Thoracic, Hirschsprungs Disease, Bilareral Lower Extremity Paralysis	
15	168	9%	27	Cardiorespiratory Arrest, Neurofibroma	UNK
16	207	8%	40	Fatal Cardiac Arrhythmis, Severe Pulmonary Edema, Coronary Atherosclerosis	NO
17	208	8%	11	Blunt Force Trauma, Motor Vehicle Accident	NO
18	220	8%	44	Fatal Cardiac Arrhythmia, Fentanyl Toxicity	UNK

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 1159 HEALTH
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
Fund 1159 HEALTH						
Fiscal Year 2017						
Department 000						
Category 1 Taxes and Intergovernmental						
Revenues						
000-5000 GENERAL PROPERTY TAXES	0.00	0.00	0.00	99,065.08	254,134.56	-254,134.56
000-5100 AUTO AND AIRCRAFT EXCISE TAX INTEF	0.00	0.00	0.00	10,045.39	18,197.85	-18,197.85
000-5200 FINANCIAL INSTITUTION TAX	0.00	0.00	0.00	336.22	735.74	-735.74
000-5400 FEES	0.00	0.00	0.00	21,854.00	82,203.50	-82,203.50
000-5600 COMMERCIAL VEHICLE EXCISE TAX	0.00	0.00	0.00	600.15	1,200.30	-1,200.30
Revenues Total	**0.00**	**0.00**	**0.00**	**131,900.84**	**356,471.95**	**-356,471.95**
Expenses						
000-01-1001 ADMINISTRATOR	48,888.44	0.00	48,888.44	3,767.82	48,888.43	0.01
000-01-1005 REGISTRAR	29,469.30	0.00	29,469.30	2,269.40	29,452.88	16.42
000-01-1010 FOOD SANITARIAN	39,504.50	0.00	39,504.50	3,042.21	39,482.48	22.02
000-01-1020 HEALTH NURSE/DG	49,538.13	0.00	49,538.13	3,817.04	49,538.13	0.00
000-01-1021 ASSISTANT NURSE/JF	35,777.70	0.00	35,777.70	0.00	30,147.04	5,630.66
000-01-1022 ASSISTANT NURSE/MT	14,311.08	0.00	14,311.08	964.32	13,968.54	342.54
000-01-1025 IMMUNIZATION COORDINATOR	27,724.20	1,631.00	29,355.20	2,269.41	29,355.31	-0.11
000-01-1301 HEALTH OFFICER	8,293.92	0.00	8,293.92	2,013.09	8,052.36	241.56
000-01-1310 HEALTH BOARD	1,575.00	0.00	1,575.00	0.00	1,370.00	205.00
000-01-1315 HEALTH BOARD SECRETARY	228.00	0.00	228.00	0.00	199.50	28.50
000-01-1512 LONGEVITY	3,700.00	0.00	3,700.00	3,700.00	3,700.00	0.00
000-01-1520 FICA	16,059.00	102.00	16,161.00	1,272.89	14,423.95	1,737.05
000-01-1521 PERF	29,399.00	183.00	29,582.00	2,370.82	30,385.31	-803.31

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 1159 HEALTH
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
000-01-1522 HEALTH INSURANCE	42,000.00	0.00	42,000.00	2,780.90	39,694.70	2,305.30
000-01-1523 UNEMPLOYMENT	1,330.00	0.00	1,330.00	0.00	504.75	825.25
000-01-1525 MEDICARE	3,756.00	24.00	3,780.00	297.68	3,373.34	406.66
Expenses Total	**351,554.27**	**1,940.00**	**353,494.27**	**28,565.58**	**342,536.72**	**10,957.55**
Personal Services Acct Cat Total	**-351,554.27**	**-1,940.00**	**-353,494.27**	**103,335.26**	**13,935.23**	**-367,429.50**
Category 3 Other Services and Charges						
Expenses						
000-03-3001 LEGAL SERVICES	7,500.00	-4,175.00	3,325.00	0.00	0.00	3,325.00
Expenses Total	**7,500.00**	**-4,175.00**	**3,325.00**	**0.00**	**0.00**	**3,325.00**
Other Services and Charges Acct Cat Total	**7,500.00**	**-4,175.00**	**3,325.00**	**0.00**	**0.00**	**3,325.00**
Dept Total	**-359,054.27**	**2,235.00**	**-356,819.27**	**103,335.26**	**13,935.23**	**-370,754.50**
Revenues Total	**0.00**	**0.00**	**0.00**	**131,900.84**	**356,471.95**	**-356,471.95**
Expenses Fund Total	**359,054.27**	**-2,235.00**	**356,819.27**	**28,565.58**	**342,536.72**	**14,282.55**
Net (Rev/Exp)	**-359,054.27**	**2,235.00**	**-356,819.27**	**103,335.26**	**13,935.23**	**-370,754.50**

Beginning/Adjusted Balance		YTD Revenues		YTD Expenses		Current Fund Balance
45,117.76	+	356,471.95	-	342,536.72	=	59,052.99

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 1168 LOCAL HEALTH MAINTENANCE
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
Fund 1168 LOCAL HEALTH MAINTENANCE						
Fiscal Year 2017						
Department 000						
Category 1 Personal Services						
Expenses						
000-01-1522 HEALTH INSURANCE	16,800.00	0.00	16,800.00	1,400.00	16,800.00	0.00
Expenses Total	**16,800.00**	**0.00**	**16,800.00**	**1,400.00**	**16,800.00**	**0.00**
Personal Services Acct Cat Total	**16,800.00**	**0.00**	**16,800.00**	**1,400.00**	**16,800.00**	**0.00**
Category 2 Supplies						
Expenses						
000-02-2010 OFFICE SUPPLIES	1,000.00	0.00	1,000.00	69.34	980.44	19.56
000-02-2020 GAS, OIL, LUBRICANTS	4,000.00	-1,580.00	2,420.00	290.07	2,391.23	28.77
000-02-2021 TIRES & TUBES	500.00	100.00	600.00	486.64	574.59	25.41
000-02-2022 REPAIR & MAINTENANCE SUPPLIES	500.00	580.00	1,080.00	266.25	1,069.66	10.34
000-02-2030 COMPUTER SUPPLIES	500.00	0.00	500.00	0.00	335.84	164.16
000-02-2034 BACTERIA LABORATORY	200.00	0.00	200.00	47.60	144.72	55.28
000-02-2040 REFERENCE BOOKS	200.00	-100.00	100.00	0.00	0.00	100.00
Expenses Total	**6,900.00**	**-1,000.00**	**5,900.00**	**1,159.90**	**5,496.48**	**403.52**
Supplies Acct Cat Total	**6,900.00**	**-1,000.00**	**5,900.00**	**1,159.90**	**5,496.48**	**403.52**
Category 3 Other Services and Charges						
Expenses						
000-03-3001 LEGAL SERVICES	960.00	0.00	960.00	232.50	930.00	30.00
000-03-3010 TELEPHONE	6,000.00	-500.00	5,500.00	521.43	4,184.52	1,315.48
000-03-3013 POSTAGE	2,000.00	-500.00	1,500.00	0.00	976.67	523.33
000-03-3014 MEDICAL WASTE DISPOSAL	500.00	0.00	500.00	0.00	90.00	410.00
000-03-3020 PRINTING	3,000.00	0.00	3,000.00	1,179.42	2,996.57	3.43
000-03-3021 WETLAND TESTING	5,000.00	0.00	5,000.00	0.00	1,225.00	3,775.00

16

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 1168 LOCAL HEALTH MAINTENANCE

Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
000-03-3022 BOOK RE-BINDING	1,500.00	-1,000.00	500.00	0.00	0.00	500.00
000-03-3045 BUILDING MAINTENANCE	1,000.00	0.00	1,000.00	0.00	0.00	1,000.00
000-03-3050 EQUIPMENT REPAIR / MAINTENANCE	500.00	500.00	1,000.00	0.00	796.94	203.06
000-03-3051 SOFTWARE SUPPORT	800.00	2,000.00	2,800.00	25.00	2,486.11	313.89
000-03-3054 VEHICLE MAINTENANCE	1,000.00	0.00	1,000.00	0.00	949.38	50.62
000-03-3081 SEMINARS & TRAINING	500.00	500.00	1,000.00	0.00	770.00	230.00
Expenses Total	**22,760.00**	**1,000.00**	**23,760.00**	**1,958.35**	**15,405.19**	**8,354.81**
Other Services and Charges Acct Cat Total	**22,760.00**	**1,000.00**	**23,760.00**	**1,958.35**	**15,405.19**	**8,354.81**
Category 5 Capital Outlays						
Expenses						
000-04-4010 EQUIPMENT, FURNITURE, FILES	500.00	0.00	500.00	0.00	49.99	450.01
Expenses Total	**500.00**	**0.00**	**500.00**	**0.00**	**49.99**	**450.01**
Capital Outlays Acct Cat Total	**500.00**	**0.00**	**500.00**	**0.00**	**49.99**	**450.01**
Category 9 Other Receipts						
Revenues						
000-8800 OTHER REFUNDS & REIMBURSEMENTS	0.00	0.00	0.00	0.00	695.00	-695.00
000-9900 MISCELLANEOUS REVENUE	0.00	0.00	0.00	0.00	16,569.50	-16,569.50
Revenues Total	**0.00**	**0.00**	**0.00**	**0.00**	**17,264.50**	**-17,264.50**
Other Receipts Acct Cat Total	**0.00**	**0.00**	**0.00**	**0.00**	**17,264.50**	**-17,264.50**
Dept Total	**-46,960.00**	**0.00**	**-46,960.00**	**-4,518.25**	**-20,487.16**	**-26,472.84**
Revenues Total	**0.00**	**0.00**	**0.00**	**0.00**	**17,264.50**	**-17,264.50**
Expenses Fund Total	**46,960.00**	**0.00**	**46,960.00**	**4,518.25**	**37,751.66**	**9,208.34**
Net (Rev/Exp)	**-46,960.00**	**0.00**	**-46,960.00**	**-4,518.25**	**-20,487.16**	**-26,472.84**

Beginning/Adjusted Balance		YTD Revenues		YTD Expenses		Current Fund Balance
124,203.90	+	17,264.50	-	37,751.66	=	103,716.74

15

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT
Period Ending Date: December 31, 2017

Fund 4105 IMMUNIZATION DONATION
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
Fund 4105 IMMUNIZATION DONATION						
Fiscal Year 2017						
Department 000						
Category 2 Supplies						
Expenses						
000-02-2010 IMMUNIZATION SUPPLIES	9,000.00	-7,700.00	1,300.00	213.52	1,225.85	74.15
000-02-2011 PROMOTIONAL SUPPLIES	3,000.00	-2,725.00	275.00	0.00	264.48	10.52
000-02-2012 OFFICE SUPPLIES	1,000.00	75.00	1,075.00	127.39	1,061.07	13.93
000-02-2017 NURSE'S SUPPLIES	2,000.00	600.00	2,600.00	0.00	2,569.29	30.71
000-02-2030 VACCINES	6,000.00	14,660.00	20,660.00	132.64	19,925.04	734.96
000-02-2040 UNIFORMS	2,000.00	-950.00	1,050.00	0.00	787.78	262.22
Expenses Total	**23,000.00**	**3,960.00**	**26,960.00**	**473.55**	**25,833.51**	**1,126.49**
Supplies Acct Cat Total	**23,000.00**	**3,960.00**	**26,960.00**	**473.55**	**25,833.51**	**1,126.49**
Category 3 Other Services and Charges						
Expenses						
000-03-3010 TELEPHONE	120.00	0.00	120.00	120.00	120.00	0.00
000-03-3012 TRAVEL / MILEAGE	1,500.00	-500.00	1,000.00	0.00	668.56	331.44
000-03-3013 POSTAGE	2,000.00	0.00	2,000.00	398.50	1,678.16	321.84
000-03-3014 MEDICAL WASTE	500.00	0.00	500.00	0.00	483.25	16.75
000-03-3015 CONTRACT BILLING	0.00	3,290.00	3,290.00	1,624.73	3,286.41	3.59
000-03-3020 PRINTING	2,000.00	0.00	2,000.00	0.00	1,960.25	39.75
000-03-3054 REPAIR & MAINTENANCE OF EQUIPMEN	0.00	550.00	550.00	0.00	550.00	0.00
000-03-3081 SEMINARS & TRAINING	2,500.00	-2,300.00	200.00	0.00	106.49	93.51
Expenses Total	**8,620.00**	**1,040.00**	**9,660.00**	**2,143.23**	**8,853.12**	**806.88**
Other Services and Charges Acct Cat Total	**8,620.00**	**1,040.00**	**9,660.00**	**2,143.23**	**8,853.12**	**806.88**
Category 5 Capital Outlays						
Expenses						

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 4105 IMMUNIZATION DONATION

Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
000-04-4010 EQUIPMENT	1,000.00	-1,000.00	0.00	0.00	0.00	0.00
000-04-4011 HEALTH DEPARTMENT REMODEL	5,000.00	-4,000.00	1,000.00	0.00	1,000.00	0.00
Expenses Total	**6,000.00**	**-5,000.00**	**1,000.00**	**0.00**	**1,000.00**	**0.00**
Capital Outlays Acct Cat Total	**6,000.00**	**-5,000.00**	**1,000.00**	**0.00**	**1,000.00**	**0.00**
Category 9 Other Receipts						
Revenues						
000-5400 DONATIONS	0.00	0.00	0.00	958.00	41,156.19	-41,156.19
Revenues Total	**0.00**	**0.00**	**0.00**	**958.00**	**41,156.19**	**-41,156.19**
Other Receipts Acct Cat Total	**0.00**	**0.00**	**0.00**	**958.00**	**41,156.19**	**-41,156.19**
Dept Total	**-37,620.00**	**0.00**	**-37,620.00**	**-1,658.78**	**5,469.56**	**-43,089.56**
Revenues Total	**0.00**	**0.00**	**0.00**	**958.00**	**41,156.19**	**-41,156.19**
Expenses Fund Total	**37,620.00**	**0.00**	**37,620.00**	**2,616.78**	**35,686.63**	**1,933.37**
Net (Rev/Exp)	**-37,620.00**	**0.00**	**-37,620.00**	**-1,658.78**	**5,469.56**	**-43,089.56**

Beginning/Adjusted Balance		YTD Revenues		YTD Expenses		Current Fund Balance
29,515.97	+	**41,156.19**	-	**35,686.63**	=	**34,985.53**

15

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 9110 TOBACCO SETTLEMENT
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
Fund 9110 TOBACCO SETTLEMENT						
Fiscal Year 2017						
Department 000						
Category 1 Taxes and Intergovernmental						
Revenues						
000-9900 GRANT FUNDING	0.00	0.00	0.00	0.00	10,955.32	-10,955.32
Revenues Total	**0.00**	**0.00**	**0.00**	**0.00**	**10,955.32**	**-10,955.32**
Expenses						
000-01-1001 ADMINISTRATOR	6,500.00	0.00	6,500.00	500.00	6,500.00	0.00
000-01-1002 ASSISTANT NURSE	20,844.60	0.00	20,844.60	837.76	20,065.36	779.24
000-01-1520 FICA	1,696.00	0.00	1,696.00	72.13	1,444.81	251.19
000-01-1523 UNEMPLOYMENT	320.00	0.00	320.00	0.00	67.05	252.95
000-01-1525 MEDICARE	397.00	0.00	397.00	16.86	337.94	59.06
Expenses Total	**29,757.60**	**0.00**	**29,757.60**	**1,426.75**	**28,415.16**	**1,342.44**
Personal Services Acct Cat Total	**-29,757.60**	**0.00**	**-29,757.60**	**-1,426.75**	**-17,459.84**	**-12,297.76**
Category 2 Supplies						
Expenses						
000-02-2011 GENERAL SUPPLIES	1,455.00	-325.00	1,130.00	0.00	0.00	1,130.00
Expenses Total	**1,455.00**	**-325.00**	**1,130.00**	**0.00**	**0.00**	**1,130.00**
Supplies Acct Cat Total	**1,455.00**	**-325.00**	**1,130.00**	**0.00**	**0.00**	**1,130.00**
Category 3 Other Services and Charges						
Expenses						
000-03-3002 MOBILE MAMMOGRAPHY	2,000.00	0.00	2,000.00	0.00	2,000.00	0.00
000-03-3021 ADVERTISING	6,500.00	325.00	6,825.00	673.60	6,798.40	26.60
Expenses Total	**8,500.00**	**325.00**	**8,825.00**	**673.60**	**8,798.40**	**26.60**
Other Services and Charges Acct Cat Total	**8,500.00**	**325.00**	**8,825.00**	**673.60**	**8,798.40**	**26.60**
Dept Total	**-39,712.60**	**0.00**	**-39,712.60**	**-2,100.35**	**-26,258.24**	**-13,454.36**
Revenues Total	**0.00**	**0.00**	**0.00**	**0.00**	**10,955.32**	**-10,955.32**
Expenses Fund Total	**39,712.60**	**0.00**	**39,712.60**	**2,100.35**	**37,213.56**	**2,499.04**

16

DEPARTMENT HEAD BUDGETARY STATUS

LAGRANGE CO GOVT

Period Ending Date: December 31, 2017

Fund 9110 TOBACCO SETTLEMENT
Department

Account Number / Account Name	Current Year Appropriated Budget	Net Budget Amendments	Current Year Total Amended Budget	Month-to-date Actual	Current Year-to-date Actual	Current Budget Balance
Net (Rev/Exp)	-39,712.60	0.00	-39,712.60	-2,100.35	-26,258.24	-13,454.36

Beginning/Adjusted Balance		YTD Revenues		YTD Expenses		Current Fund Balance
195,263.53	+	10,955.32	-	37,213.56	=	169,005.29

16

REPORT OF COLLECTIONS

TO: LaGrange County Auditor

LaGrange County
Indiana

LaGrange County Health Dept.
(Governmental Unit)

Collection for Period: From: December 27, 2017

To: December 29, 2017

Description:	This Period:	Prior YTD:	YTD:	Credit Fund:	This Period:	Prior YTD Collect:	YTD Collect:
Births	6	1398	1404	1159-000-5400	90.00	20985.00	21075.00
Genealogy/P.A.	0	21	21	1159-000-5400	0.00	194.00	194.00
Deaths	5	1476	1481	1159-000-5400	26.00	7484.00	7510.00
Septics	0	202	202	1159-000-5400	0.00	16500.00	16500.00
							0.00
Installers	0	44	44	1159-000-5400	0.00	6600.00	6600.00
Pool Permits	3	5	8	1159-000-5400	300.00	500.00	800.00
Food/Chem Strp	10	293	303	1159-000-5400	1330.00	29940.50	31270.50
				TOTAL 1159:	1746.00	82203.50	83949.50
Coroner Educ.	5	1476	1481	7106-000-5400	10.00	2950.00	2960.00
Cash Donations	0	160	160	4105-000-5400	0.00	41070.19	41070.19
GRAND TOTAL:	29	5075	5104		1756.00	126223.69	127979.69

Cash	60.00	Checks	1,696.00	1,756.00	Plus Flu	0.00	1,756.00

I hereby certify the foregoing is a true and correct report of collections due the above named governmental unit for the period shown.

Current:	Prior:	YTD:
0	2	2

Dated the Dec. 29, 2017

Kelly Bills
(Signature)

Vital Records Registrar
(Title of Officer)

Note: The official to whom the report is made must issue an official receipt for the remitted.

1000-000-8850 Flu Shots = 0.00

62

Immunization Data Program Update

January 9, 2017

The Immunization Improvement Process plans strategies, with the goal of increasing the ratio of infants 1 to 6 months of age in LaGrange County who receive the recommended immunizations in a timely manner, continues to be maintained and updated.

All new births in LaGrange County have been entered into the birth registry through 1/3/2017.

Postcards continue to be sent out to all parents of newborns in LaGrange County. Another 500 postcards have been ordered. To date, 494 postcards have been mailed. These postcards recommend parents to get their children vaccinated as soon as possible, as well as having the Health Department contact information, and the Beautiful Child of Lagrange County Facebook page information listed on the postcard.

Letters and questionnaires have been mailed out to all 2014, and 2015 parents of births for those years. A total of 511 questionnaires were mailed out for 2014 births, and a total of 537 questionnaires were mailed out for 2015. Completed questionnaires continue to be returned with many giving suggestions and concerns they would like to be addressed. So far, a total of 156 completed questionnaires have been returned, 34 have been returned for wrong address and no forwarding address available, 31 questionnaires with forwarding address, which have been resent with corrected address. 36 questionnaires have been returned with requests such as phone numbers to schedule appointments, location addresses, etc. Information requested with those questionnaires has been mailed back to them.

Spoke with Ann Kadish, with Parkview LaGrange, regarding the possibility of Parkview LaGrange partnering with the health department with advertising and other possibilities. Ann stated that they do not really advertise in any of the papers, and they only advertise on radio and internet when they are partnering and doing things with other parties, such as health fairs, etc. They were hosting a health fair, but targeted to older kids/adults. The possibility of advertising on the radio, in the Amish Die Blatt, People's Exchange, and possibly billboards and transportation continue to be a possibility.

The possibility of the "Well Child Wednesday" clinic continues to be a project that I am working on gathering ideas and information to see if this would be a benefit to the community.

Report submitted by: Nikki Gyovai, RN

Immunization Data Program Update

July 3, 2017

The Immunization Improvement Process plans strategies, with the goal of increasing the ratio of infants 1 to 6 months of age in LaGrange County who receive the recommended immunizations in a timely manner continue to be maintained and updated.

All birth records in LaGrange County have been entered into the birth registry through June 2017.

All completed questionnaires were compiled on a spreadsheet for review. These questionnaires were mailed out to all 2015 babies to see what percentage completed their primary vaccinations in a timely manner, as well as inquiring what roadblocks these families faced that prevented them from completing the vaccinations on time. Many of the responses we received included concerns with side effects, transportation, weather, concerns with how vaccinations are made and many other concerns. We are going to use this vital information we received to help educate our community on the importance of vaccinations.

Beautiful Child of LaGrange County postcards continue to be sent out after birth to remind parents to schedule their child's immunizations when baby is 2 months old to help protect their newborn from getting any vaccine preventable diseases.

Beautiful Child of LaGrange County Facebook page continues to provide helpful immunization information and links.

We have been contacting local Amish schools in LaGrange County from a list of Amish schools that we have. We have been discussing the importance of vaccinations and helping prevent vaccine preventable disease. We have successfully scheduled a vaccination clinic on July 21st, 2017 from 9am - 12pm at Eddy Village Amish School located at 7180 S 075 W Wolcottville, IN 46795. We are taking appointments as well as walk in's. The vaccination clinic at the Eddy Village School has been advertised for free in the De Blatt Amish newspaper. Fliers have also been put together and given out at the Topeka fire station to advertise this clinic. (see attached copy of flier)

We also recently held an extra vaccination clinic at Topeka on the 5th Thursday in June (29th) to help get more children vaccinated. We are offering eligible infants and children ages 2 months through 18, as well as eligible adults 19 and older to participate in these vaccination clinics.

We recently attended Parkview's Wellness on the Road for children at Shipshewana's Wolfe building on Saturday, May 6th, 2017 from 1pm – 3pm. During this event, we set up games for children encouraging healthy lifestyles, as well as gave out vaccination coloring pages,

vaccination schedule keychains, and magnets. We answered any questions children and parents had regarding vaccinations and the importance of vaccinating on time to keep children healthy. We are working with Parkview Hospital's Ann Kadish to attend more of these events in the community in the future.

We have been discussing the possibility of putting together a community informational event to educate our community about vaccinations and their importance. I have been in contact with parents of Kristen Forbes, a 24 year old who was one of the girls featured in the documentary, Someone You Love: the HPV epidemic. She passed away at 23 years old after a one year battle with cervical cancer. Kristen Forbes parents, Kirk and Brenda, are now advocates for the HPV vaccination and when available, they attend some of the documentary screenings. Brenda Forbes has stated that if we have a community event and she is available she would be willing to attend and speak about her daughters' experience. She also stated that the parents of baby Callie Van Tornhout, who passed away from Pertussis, has been to several of the same speaking engagements and recommended trying to set both families up to speak to our community. This is something I am working on in hopes we can hold an event such as this and educate our community about these vaccine preventable diseases.

Report submitted by: Nikki Gyovai, R.N.

VACCINATION CLINIC

Eddy Village School

7180 S 075 W

Wolcottville, IN 46795

Friday July 21st, 2017

9:00 am – 12:00 pm

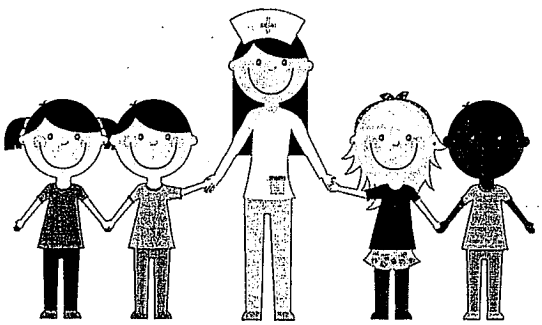
*For eligible infants and children ages 2 months through 18 years, and eligible adults 19 +. Please bring a copy of your child's most current shot record.

* Underinsured and those with no insurance eligible.

Hosted by: LaGrange County Health Department

304 N Townline Rd. Suite 1. LaGrange, IN 46761

For appointments call: (260) 499-4182 X1



Lola

PERTUSSIS

How Pertussis Changed Our Lives

On December 24, 2009 I gave birth to a feisty 4lb 5oz baby girl named Callie. She was our "miracle" baby after 5 years of trying and 4 miscarriages. She came 6 weeks early due to pre-eclampsia and spent 12 days in the neonatal intensive care unit. She came home and she thrived. She was happy, and gaining weight. She was the PERFECT baby. On January 24 we noticed she had a small cough. On Monday I took her to the doctor and they told me it was "just a cough" and would be gone in a few days. Tuesday, she was more tired than usual. Wednesday she was lethargic and wasn't eating. We went back to the doctor and while waiting, she stopped breathing in my arms. She came back on her own, but we were rushed to the emergency department and admitted into the pediatric intensive care unit. It wasn't until Friday that they tested for Meningitis and Pertussis (whooping cough). At 11:00 pm after a respiratory therapy session, her condition worsened. At 1:17 am she was GONE. It wasn't until Monday, February 1 that we learned she passed from Pertussis. February 1 was her original due date....the same date as her viewing.

We keep Callie's spirit alive by educating others about pertussis and the importance of the DTaP vaccine for infants and young children and the Tdap vaccine for pregnant women, adolescents and adult family members.

Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium Bordetella pertussis. Babies can contract the disease from family members or others who don't know they have the disease. Whooping Cough or Pertussis is spread easily through the air when the infected person coughs or sneezes. Pregnant women who are infected can also transmit the disease to their unborn baby.

Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with pertussis often needs to take deep breathes which result in a "whooping" sound. Pertussis most commonly affects infants and young children and can be fatal, especially in babies less than 1 year of age.

Last year, there were 29,000 cases of pertussis in the United States and about 700 cases in Indiana.

The best way to protect against pertussis is to be vaccinated with the DTaP or Tdap vaccine which protects against diphtheria, tetanus and pertussis. Pregnant women should be vaccinated in their third trimester to protect their newborns. All family members should receive the vaccine to protect the newborn baby. Infants should receive the vaccine at 2 months of age with five doses given up to 6 years of age.

Ask your doctor about the DTaP or Tdap vaccine.

For more information, visit www.vaccinateindiana.org

INDIANA IMMUNIZATION COALITION

These materials were created by the Indiana Immunization Coalition, Inc. and were funded by the Indiana State Department of Health through a grant from the Centers for Disease Control and Prevention (Award No: 5H23IP000723).

Immunization Data Program Update

October 6, 2017

The immunization Improvement Process plans strategies, with the goal of increasing the ratio of infants 0 to 6 months of age in LaGrange County who receive the recommended immunizations in a timely manner continue to be maintained and updated.

All Birth records that were not in the Immunization Improvement project immunization records have been updated

We have completed two successful shot clinics at Eddy Village Amish School in Wolcottville. The second shot clinic was held on Friday, September 22, 2017. The next shot clinic at Eddy Village will be held on November 17, 2017 from 9-11am.

Late hour clinics are scheduled for Topeka, and LaGrange for flu clinics in October 16th, and October 26th.

Grant application has been submitted to work on obtaining a new van to be used for shot clinics.

Submitted by: Shantell Gyovai, RN

lagrange county health dept.

caring with a personal touch

VACCINATION CLINIC

Eddy Village School

7180 S 075 W

Wolcottville, IN 46795

Friday September 22nd, 2017

9:00 am – 11:00 am

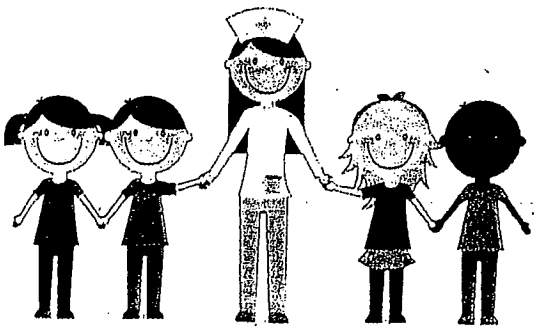
*For eligible infants and children ages 2 months through 18 years, and eligible adults 19 +. Please bring a copy of your child's most current shot record.

* Underinsured and those with no insurance eligible.

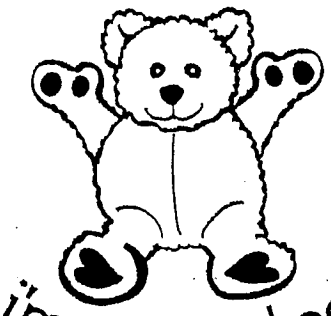
Hosted by: LaGrange County Health Department

304 N Townline Rd. Suite 1. LaGrange, IN 46761

For appointments call: (260) 499-4182 X1



HUG ME!



69

MEETING WITH LCHD EMPLOYEES TO DISCUSS BOARD RETREAT 3-30-2017

POINTS OF INTEREST:

OUR NUMBERS HAVE BASICALLY NOT CHANGED FOR IMMUNIZATION IMPROVEMENT IN THE PAST 5 YEARS – HOW CAN WE DO BETTER?

WHAT > PROMOTING IMMUNIZATIONS

*CHILD VACCINES FROM BIRTH -6 MONTHS AND ADOLESCENT
*HOW CAN WE **BETTER** PROMOTE HPV AND MENINGOCOCCAL?
-HPV) POSSIBLY GO WITH THE CANCER ASPECT – POSSIBLY SHOW VIDEO
*PROMOTE ADULT VACCINES

WHO > WORK ON PARTNERSHIPS:

*SCHOOLS – HEALTH TEACHERS, ATTEND SPORTS PHYSICAL DAY
*GRANDPARENTS CLUB – TELL HOW DISEASES HAVE CHANGED OVER THE YEARS W/VACCINES
*CALLING TREE – CREATE A LIST: EDC, CHAMBER, ARC, COA, LARGE CHURCHES, OTHER TOWNS IN COUNTY
*PARKVIEW – WELLNESS DAY W/ANN KADISH, PARTNER WITH FUNDING FOR FIT KITS, ETC. OR GOSHEN HOSPITAL.
*MOMMIES CONFERENCE FOR NEW MOTHER'S
*NEW EDEN CARE CENTER - LUNCH WITH STAFF, MIDWIVES PROMOTE BREASTFEEDING AND GIVE OUT EDUCATIONAL MATERIALS.
*DCS (DEPT. OF CHILDREN SERVICES)

HOW > OTHER OUTLETS TO PROMOTE IMMUNIZATIONS:

*OUR OWN SIGN – THINK UP WITTY/CUTE IDEAS
*BILLBOARD/S
*PUBLIC SERVICE ANNOUNCEMENTS – RADIO (WTHD 105.5 & WBET 99.3)
*APP FOR IMMUNIZATIONS: THINK OF A HOOK SO PEOPLE WANT TO GET APP, WHAT IS OUR ABILITY TO GATHER DATA AND WHAT WILL THEY GET FROM USING OUR APP?
*HOME VISITS – WELL BABY BAGS, LOGISTICS, EDUCATIONAL MATERIALS

OBSTACLES > WHAT WE NEED TO GO FORWARD/ISSUES TO OVERCOME

*NEW VAN WITH LOGO OR LETTERING FOR LCHD $25,000
*GATHER EDUCATIONAL MATERIALS
*FUNDS TO MEET AND EAT WITH PARTNERS
*GRANTS FOR OUTREACH CHILDCARE OR TALK TO OTHER GROUPS THAT HAVE HAD THE SAME PROBLEM – WHAT THEY DID TO SOLVE THEM.
*CHIRP AND STATE TO MAKE SURE NEWBORNS ARE ENTERED INTO CHIRP – NUMBERS TO KNOW WHO IS NOT GETTING VACCINES (DEMOGRAPHIC AND STATISTICAL INFORMATION)

A MEETING WITH LCHD EMPLOYEES WAS HELD ON 3-30-2017 TO DISCUSS POINTS OF INTEREST FOR THE BOARD RETREAT. The biggest point: **OUR NUMBERS HAVE BASICALLY NOT CHANGED FOR IMMUNIZATION IMPROVEMENT IN THE PAST 5 YEARS – HOW CAN WE DO BETTER?**

WHAT > PROMOTING IMMUNIZATIONS

*CHILD VACCINES FROM BIRTH -6 MONTHS AND ADOLESCENT – *notes on previous page*

*HOW CAN WE **BETTER** PROMOTE HPV AND MENINGOCOCCAL -HPV) POSSIBLY GO WITH THE CANCER ASPECT – POSSIBLY SHOW VIDEO *Meet with/in the schools*

*PROMOTE ADULT VACCINES - *FLU*

Dr. Pechin noted that to make vaccines safer they have become less effective due to using less antigen. That is why say tetanus, instead of getting it every 10 years some suggest you get it more often.

WHO > WORK ON PARTNERSHIPS:

*SCHOOLS – HEALTH TEACHERS, ATTEND SPORTS PHYSICAL DAY

*GRANDPARENTS CLUB – TELL HOW DISEASES HAVE CHANGED OVER THE YEARS W/VACCINES – *can advocate because they know what not having vaccines is like.*

*CALLING TREE – CREATE A LIST: EDC, CHAMBER, ARC, COA, LARGE CHURCHES, OTHER TOWNS IN THE COUNTY – *Developing community support, diffusion of information, good ideas to stimulate improvement, health fair info*

*PARKVIEW – WELLNESS DAY W/ANN KADISH, PARTNER WITH FUNDING FOR FIT KITS, ETC. OR GOSHEN HOSPITAL.

*MOMMIES CONFERENCE FOR NEW MOTHER'S – *have food and goodies, sponsored programs a few times a year.*

*NEW EDEN CARE CENTER - LUNCH WITH STAFF, MIDWIVES PROMOTE BREASTFEEDING AND GIVE OUT EDUCATIONAL MATERIALS *Dr. Mielke will call midwifes and try to help us get into New Eden.*

*DCS (DEPT. OF CHILDREN SERVICES) *– join their health fairs*

HOW > OTHER OUTLETS TO PROMOTE IMMUNIZATIONS: *Use Facebook as a more active outlet.*

*OUR OWN SIGN – THINK UP WITTY/CUTE IDEAS

*BILLBOARD/S *– utilize more*

*PUBLIC SERVICE ANNOUNCEMENTS – RADIO (WTHD 105.5 & WBET 99.3) *find out more*

*APP FOR IMMUNIZATIONS: THINK OF A HOOK SO PEOPLE WANT TO GET APP, WHAT IS OUR ABILITY TO GATHER DATA AND WHAT WILL THEY GET FROM USING OUR APP? *See if other H.D. have this?*

*HOME VISITS – WELL BABY BAGS, LOGISTICS, EDUCATIONAL MATERIAL – *good for the Amish, new mothers let them know what we have and what we do. Like a welcome wagon- potential to really make a dent in our problem.*

**Get information into all of the transportation vehicles – 11 LCAT vans (92% Amish), other Amish drivers, Community Dental Office videos/materials.*

OBSTACLES > WHAT WE NEED TO GO FORWARD/ISSUES TO OVERCOME

*NEW VAN WITH LOGO OR LETTERING FOR LCHD $25,000

*GATHER EDUCATIONAL MATERIALS

*FUNDS TO MEET AND EAT WITH PARTNERS

*GRANTS FOR OUTREACH CHILDCARE OR TALK TO OTHER GROUPS THAT HAVE HAD THE SAME PROBLEM – WHAT THEY DID TO SOLVE THEM?

*CHIRP AND STATE TO MAKE SURE NEWBORNS ARE ENTERED INTO CHIRP – NUMBERS TO KNOW WHO IS NOT GETTING VACCINES (DEMOGRAPHIC AND STATISTICAL INFORMATION) –*data for H.D. immunizations entered into CHIRP, data Is not accurate*

We will continue with these ideas.

Indiana State Department of Health

Indiana State Department of Health

Immunization Division

County Immunization Rate Assessment

2017

Immunization Division

Kimberly Cameron, Assessment Epidemiologist

presents a selection bias, as many individuals who are not up to date with vaccinations may refuse to give permission, as these records would then be excluded from the analysis. Additionally, any child whose immunization history cannot be verified is excluded from the analysis.

Results

The full results of this assessment can be found in the data table in Appendix A. A comparison between 2016 and 2017 immunization completion rates by county, number assessed and population represented can be found in Appendix B. Table 1 below summarizes the state average, weighted by county population assessed and lists the 10 counties with lowest rates. A summary of the number of VFC providers by county is also provided. Table 2 below displays the state average with the counties with the 10 highest rates. A summary of the number of VFC providers by county is also provided. Table 3 below summarizes 2016 and 2017 Indiana assessment overall.

Table 1: Ten Lowest Rates by County

COUNTY	COMPLETION RATE FOR 4:3:1:3:3:1:4	NUMBER OF VFC PROVIDERS ENROLLED
~INDIANA	**63%**	**778**
DAVIESS	45.7%	9
LAGRANGE	47.1%	7
GRANT	49.5%	8
ST JOSPEPH	50.5%	40
LAKE	53.4%	57
WELLS	53.6%	2
JACKSON	55.5%	3
ALLEN	55.8%	26
ELKHART	57.6%	33
CRAWFORD	58.1%	2

2016
46%

2016 LCHD IMMUNIZATION SURVEY

Questions from Survey:

Needs follow-up	1	2	3	4	5	TOTALS
1. My child, who was born in 2016:						
Is up to date on all shots	5	13	7	12	7	44
Has had some recommended shots	5	6	9	7	3	30
Has not had any shots	12	7	9	7	8	43
Not sure	1	0	1	0	0	2
2. Why my child is not up to date on shots:						
My child is up to date on shots	3	5	4	7	4	23
Shots are too expensive	0	1	1	0	0	2
I forgot to schedule/about appointment	5	4	2	4	3	18
I don't know where to go get shots	1	1	1	0	0	3
I don't know what shots my child needs	1	0	1	1	1	4
I am intentionally delaying my child's shots due to:						
Weather	1	1	1	0	1	4
Child's age	5	2	4	3	3	17
Other (response with alpha letter)	3	1	5	3	1	13
I do not plan on getting my child's shots due to:						
Side Effects	8	1	7	7	2	25
Religious objection	3	0	2	0	1	6
Cannot receive shots due to health condition	0	0	0	0	0	0
Shots don't work	1	0	1	1	1	4
Other (response with alpha. letter)	3	1	4	5	4	17
3. I get trusted information about health topics from:						
My doctor/nurse	11	17	11	13	12	64
family/friends/neighbors	10	12	17	18	12	69
minister/bishop/priest	0	2	1	1	2	6
other health expert (response with alpha. letter)	5	2	6	2	4	19
websites please list (repsonse with alpha. Letter)	1	0	3	0	1	5
other please list (response with alpha. Letter)	5	4	5	2	4	20
4. The reasons that make it difficult to get my childs shots:						
shots are too expensive	0	1	2	0	1	4
transportation issues	0	2	3	2	1	8
health department hours are inconvenient	0	0	1	0	1	2
healthcare workers have treated me poorly in the past	0	0	0	0	0	0
weather conditions	1	3	2	5	1	12
forgot about appointment	1	2	2	0	0	5
don't know when shots are needed	2	0	1	1	0	4
I don't have a difficulty	12	8	10	12	5	47
other please list (response with alpha. letter)	4	6	10	3	3	26
5. I agree with the following statements						
shots are important to my child's health	13	22	15	13	10	73
shots are effective	10	12	13	13	11	59
shots are important to the health of my community	12	18	12	13	10	65
diseases (whooping cough, measles) are present	14	15	20	13	14	76
6. I prefer to learn about new topics by						
talking/listening to someone	11	12	14	6	7	50
reading a brochure/pamphlet	10	12	14	9	13	58
looking at a poster	1	0	1	1	1	4
watching a video	0	0	0	1	1	2
other please list (response with alpha. letter)	1	0	4	2	3	10
7. I would like to receive more information about:						
recommended shot schedules	6	3	3	5	6	23
how shots work	6	7	6	7	6	32
how shots impact the health of a community	3	1	3	1	6	14
what is in a vaccine	10	12	12	12	9	55
where to go to get shots	2	1	0	0	2	5
what shots are required for school	1	1	5	3	6	16
what are the risks of shots	7	10	12	7	11	47
what are the side effects of shots	8	8	10	7	11	44
how effective are shots	7	12	9	7	8	43
other please list (response with alpha. Letter)	3	1	2	1	0	7
						286

85 - 2014 mixed in

2016 Birth Info.		
Total Births	Births in LaG Co	Surveys Rec.
752	503	84

Percentage of Returned Surveys = 16.70%