### Home Sewage Treatment Systems

Where we are at. Where we are going.



Defiance County
General Health
District



## **Defiance County**

- Approximately 6,000 households in Defiance County are served by private sewage systems.
- These are all located in the Maumee Basin.
- Estimate 85% of these systems discharge off-lot.
- The Health District has installation records on about 75% of these systems dating back to 1948.
- Much of the information is incomplete or outdated.

# Discharging septic systems

- Due to change in law, new or replacement systems installed after 2006 must have an EPA NPDES permit to discharge effluent.
- Since that time 112 on-lot systems have been installed. 1 NPDES permit has been issued for a discharging system.

Source	Population	Amount treated
Defiance WWTP-Defiance + Ayersville	19,000	6 MG Daily Design Flow (DDF)
General Motors	Industrial	1.5 MG/day
Home septic systems –Defiance County	14,600	1 MG/day
Hicksville WWTP	3,600	0.95 MG DDF
Sherwood	827	Est. 0.058 MG/day
Ney	354	Est. 0.025 MG/day
County Sewer System	700	0.296 MG DDF

#### Current DCGHD activities

- The health district registers sewage installers, service providers and septic tank pumpers.
- Before installation permits are issued, each building site must go through an soil evaluation, system design and site review process.
- The department has been actively pursuing grant funding to assist owners of existing systems.
- New rules effective January 1 of this year require local health districts to establish an operation and maintenance program.

## Septage disposal

- Septic tank pump reports have been required since 2003.
- Average of 400,000 gallons of solids and liquids removed from about 400 tanks each year.
- Majority of septage is taken to WWTP for further treatment. Small amounts applied to farm fields.
- Recommended pumping frequency is 3-5years depending on the size of the tank and the size of the family.
- At the current pace tanks are being pumped on average every 15 years.

### Recent grant activity

Year	Fund Source	Amount	Purpose	Result
2009- 2010	ARRA	28K	Replace failing STS (Sewage Treatment System)	3 systems replaced
2014	Ohio EPA	53k	Cost share repair/replace STS -Powell Creek	4 systems replaced 1 system repaired
2015	ODSA-CHIP		Loan or grant to repair/ replace STS	Currently 3 systems in process
2015 WPCLF	USEPA/ Ohio EPA / ODH	100k	Cost share to repair/replace STS, based on income and assigned based on watershed factors.	Awarded this month. Goal to repair/replace six systems.
2015 LGE/GLIF	ODSA-Ohio Development Services Agency	82K	Shared by 7 county area to assist in collecting data that will be used to set up O&M programs.	Awarded this month. Plan to begin in fall of this year.



## Operation & Maintenance Program

- Funding by Operation Permit fees
- Goal to identify and inspect every system within ten years.
- Desired result
  - Identify and correct nuisance conditions.
  - Increase homeowner knowledge of STS.
  - Timely repair and maintenance of STS.
  - Improved water quality and public health.