

Local Health Department Operations

Kentucky Watershed Academy

July 1, 2020



Kentucky Public Health
Prevent. Promote. Protect.

Health Department and Watershed

- What programs do they do?
- How are they trained?
- How are they organized?
- Professional organizations
- Specific roles in water
- Latest in industry practices

Other Local Health Department Duties

- Inspections of all food service establishments
- Inspections of mobile home and RV parks
- Inspections of schools
- Radon gas education, prevention, mediation and testing
- Rabies testing and prevention
- Public swimming pool inspections
- Many other public health roles and responsibilities

How Are They Trained

- Each LHD Environmentalist has been trained in four stages:
 - Basic soils morphology
 - Phase one onsite sewage
 - Phase two onsite sewage
 - Full certification onsite sewage

Basic Soils Morphology

- New hires are required to attend Soils one course at The University of Kentucky in Lexington.
- A passing score of 70% is required after a week of heavy instruction in a classroom and lab.



Phase 1 and 2

- Phase 1

- One week of classroom instruction
- Covers basics in field craft and site evaluations
- A test with a passing grade of 80% required

- Phase 2

- Preceded by 5 one on one visits from DPH Staff
- One week training under field conditions
- A written and field test is required with a passing score of 80%



Full Certification

- During the next 12 months after phase 2
- One visit per quarter from DPH staff to evaluate their progress
- A fifth visit from DPH is completed for a field test.
- A passing score of 80% is required to be fully certified to work onsite sewage

Continued Education

- All Environmentalists must get 10 hours of continuing education to keep their R.S. license
- A soils II advanced soils morphology field class is offered across the State 3 times a year
 - Soils II is a two day field class
 - Classes are given by Soils scientists from WKU and UK



How Are They Organized

- Each County has a Local Health Department
- Health departments can stand alone as an independent or be part of a district encompassing a geographic region



Kentucky Department Public Health

- Administers training for all new hires
- Serves as conference and hearing officers
- Available with expertise in specific programs to aid LHD upon request
- Also available for consultation with the general public
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Field Consultants DPH

Environmental Management Branch
Community Environmental Onsite Section 502-564-4856
Ken Spach, Branch Manager
Angela Billings, Section Supervisor



Professional Organizations



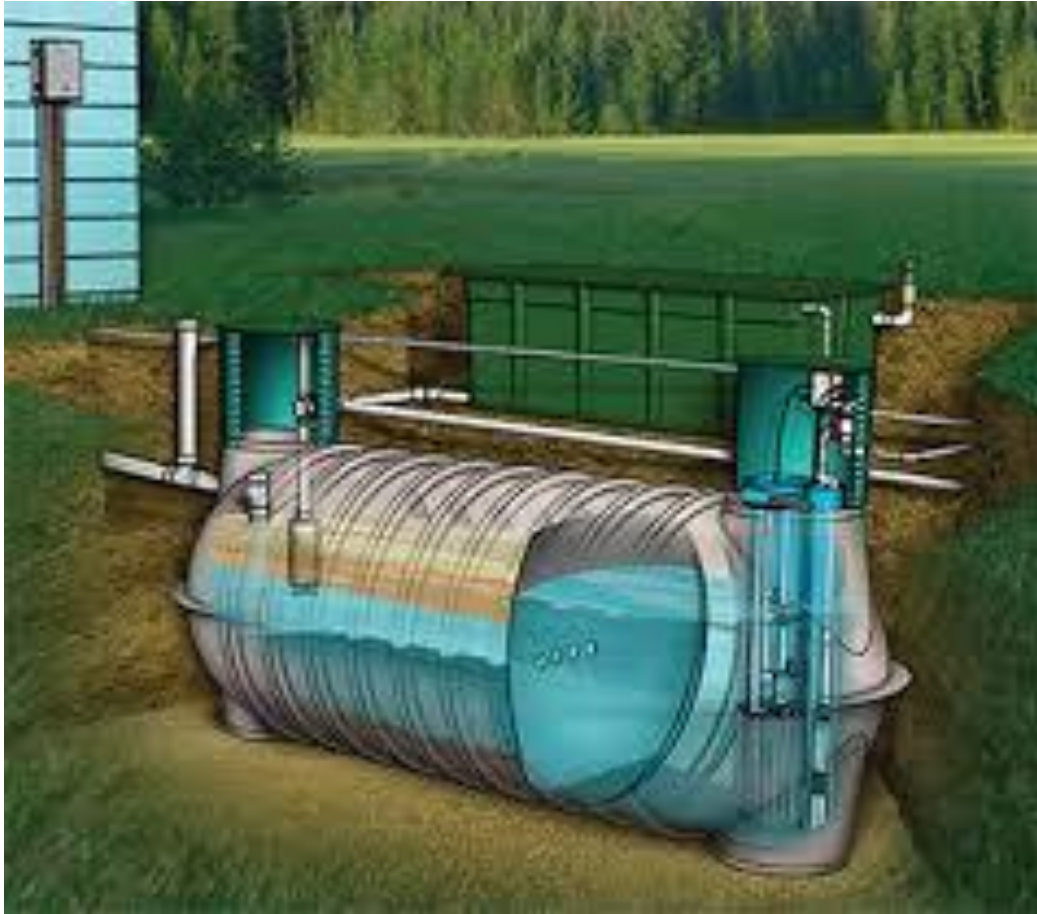
- Kentucky Onsite Wastewater Association
 - A mix of Inspectors, Installers, Private industry professionals and concrete manufacturers

Programs That Effect Watershed

- Septic systems
- Septage disposal sites
- Septage Pumpers
- Installer certification
- Component approval
- Technical consulting
- Training of all industry participants



Advanced Treatment



Residential Septic Tank Effluent vs. Secondary Quality Effluent

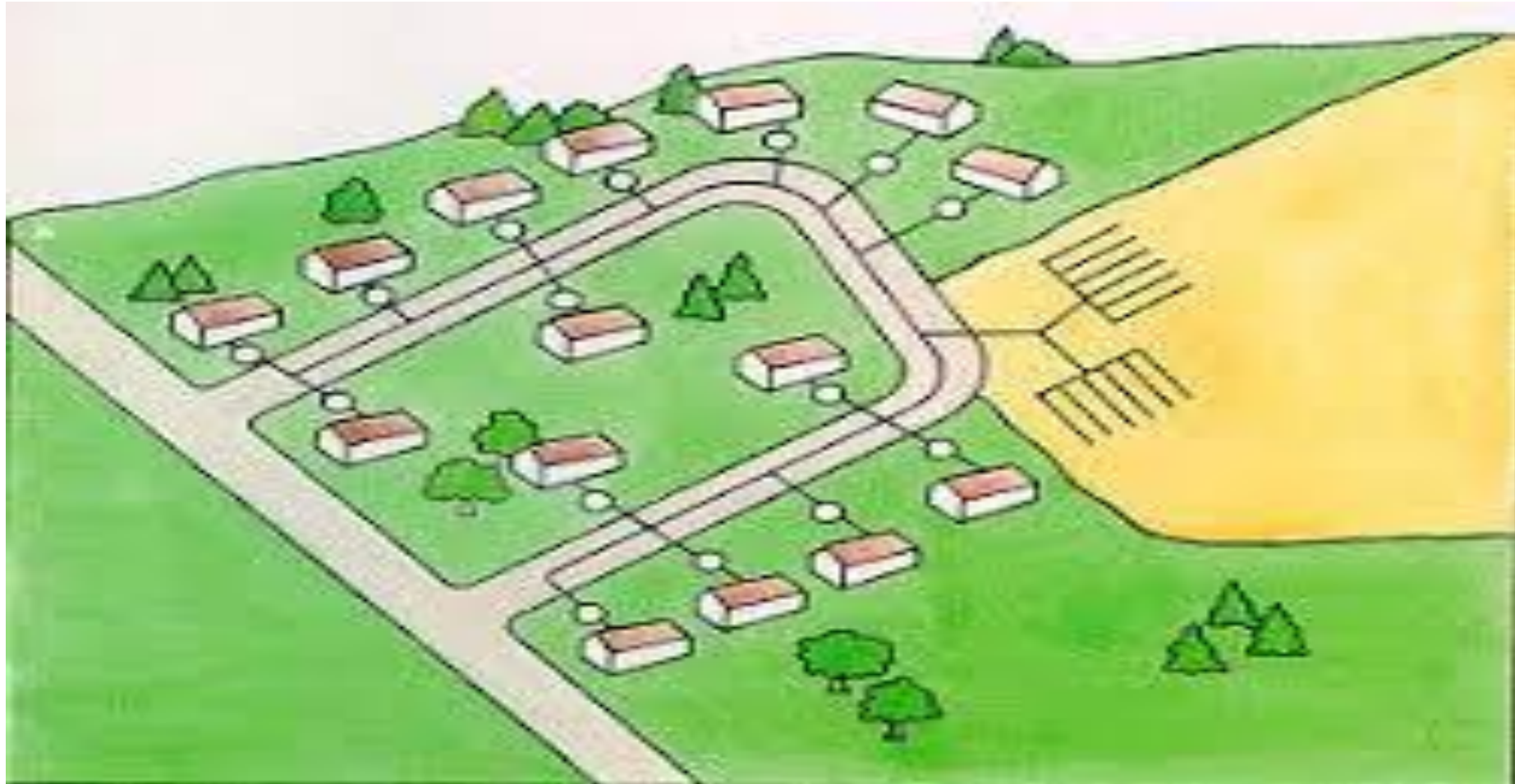
- Residential effluent
 - BOD5: 110 to 250 mg/l
 - TSS: 44 to 155 mg/l
- Secondary quality effluent
 - BOD5: < 30 mg/l
 - TSS: < 30 mg/l



Cluster Systems

- Entire neighborhoods or small communities on one system
- Lowers the amount of land necessary for a home
- Ensures funds are available for maintenance or repairs
- Allows a developer to require advanced treatments
 - Especially in a sensitive watershed area

Cluster Diagram



Constructed Wetland Cell

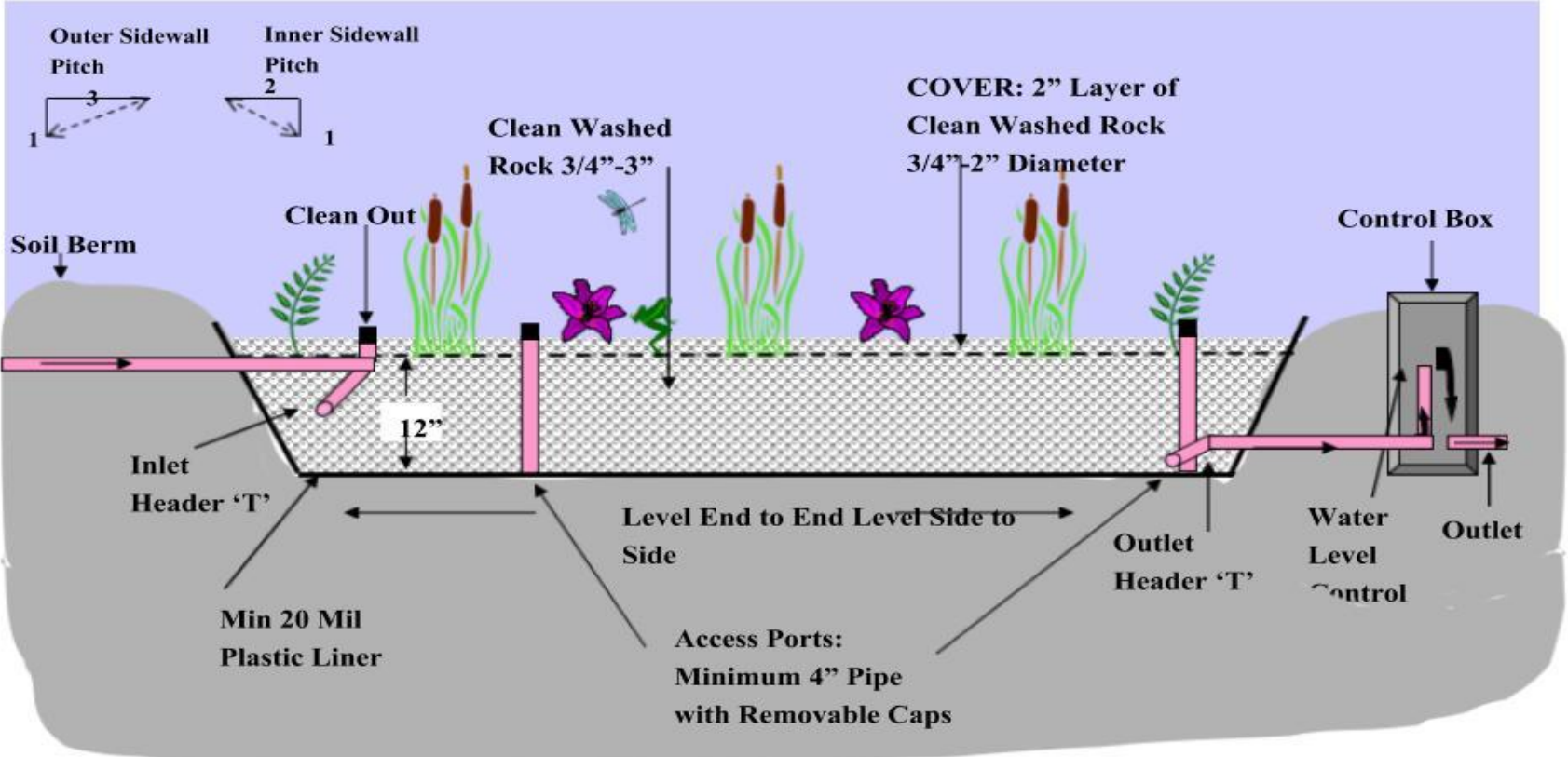
- **ADVANTAGES**

- Fifty percent reduction in lateral field
- Great on lake lots or any small lot
- Green friendly option
- Can make landscaping beautiful

- **DISADVANTAGES**

- Costs more than a typical system
- Has maintenance component

Typical Wetlands Cell











QUESTIONS

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