

NOWRA 2021

Using State Revolving Fund (SRF) grants
for Failing Onsite Remediation in
Arkansas and Missouri



The materials being presented represent the opinions of Ozarks Water Watch and do NOT reflect the opinions of NOWRA.

A scenic view of a river flowing through a forested area. The water is clear, reflecting the surrounding greenery and the sky. In the background, a large concrete dam is visible, partially obscured by trees. The overall atmosphere is peaceful and natural.

OZARKS WATER WATCH™
UWRB: Upper White River Basin Foundation

Ozarks Water Watch

Protecting and Preserving our Ozarks Heritage

CZARKS WATER WATCH™

UWRB:Upper White River Basin Foundation



Our Mission

To promote water quality in the upper White River watershed through collaboration on research, education, public policy and action projects basin-wide in both Arkansas and Missouri.

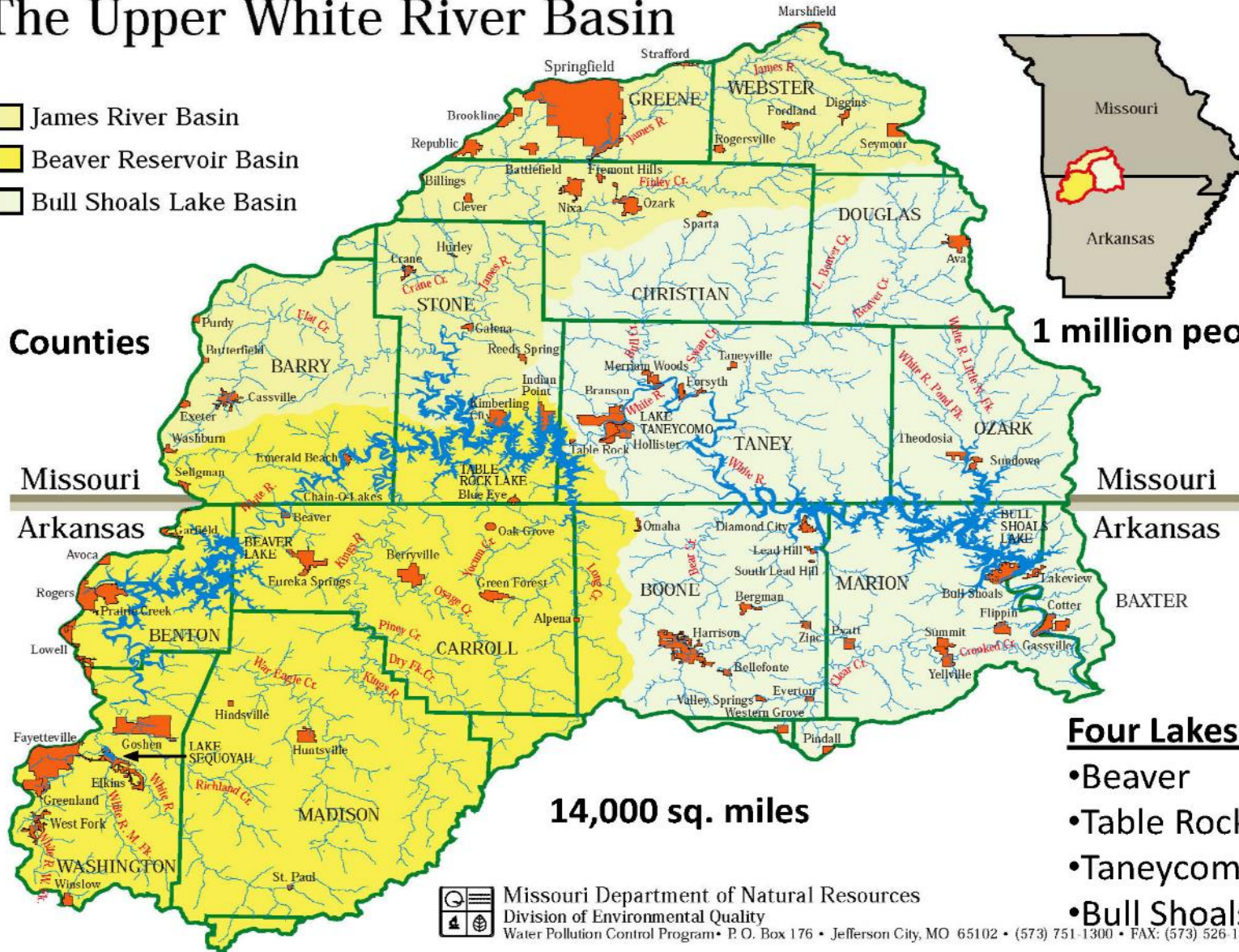


The Upper White River Basin

- James River Basin
- Beaver Reservoir Basin
- Bull Shoals Lake Basin

19 Counties

1 million people



14,000 sq. miles

Four Lakes:

- Beaver
- Table Rock
- Taneycomo
- Bull Shoals



Missouri Department of Natural Resources
 Division of Environmental Quality
 Water Pollution Control Program • P. O. Box 176 • Jefferson City, MO 65102 • (573) 751-1300 • FAX: (573) 526-1146

What is the problem?

- **Nutrients!**



- **Algae!**

An aerial photograph showing a wide river with a sandy or silty bank on the left side. The surrounding area is a mix of green fields, dense forests, and some industrial or agricultural structures. A large, dark, diagonal object, possibly a wing or part of an aircraft, is visible in the foreground, partially obscuring the view. The year '1999' is printed in white text in the lower-left quadrant.

1999

1999



What is the Problem?

Nutrients (mainly phosphorous) entering the lake from everywhere in the watershed.

TRL was placed on EPA's 2002 303(d) list of impaired water bodies due to nutrients.

These nutrients cause the growth of algae leading to cloudy water and algae blooms.

This ultimately results in undesirable water conditions and fish kills.

Sources of Phosphorous

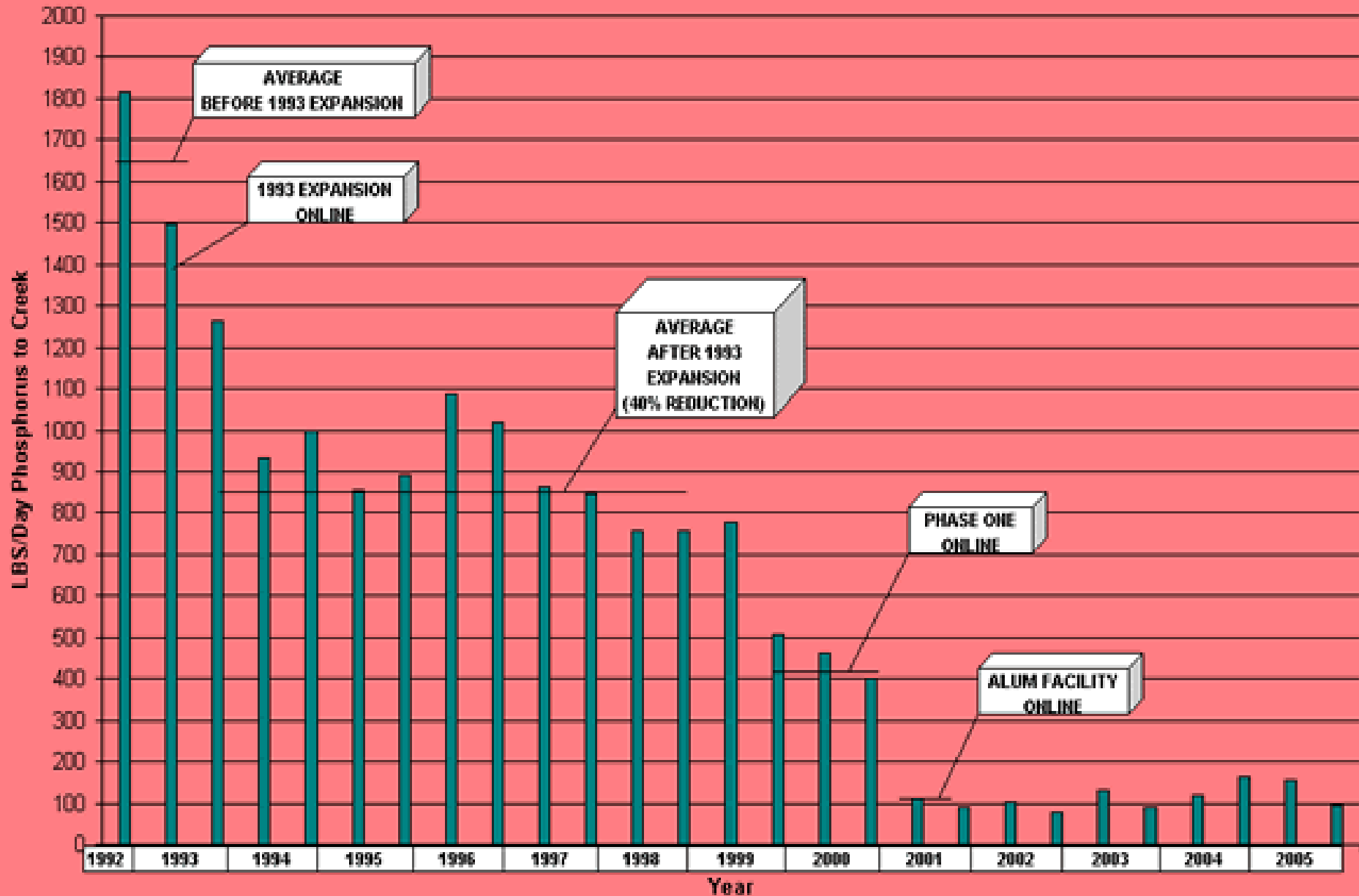
Point source:

- * Municipal Treatment Plants
(“P” permit limits of 0.5 ppm in 2001)**

Nonpoint Source:

- * Septic & Decentralized Systems**
- * Storm water runoff**
- * Overuse of commercial fertilizers**
- * Poultry litter spread on fields**
- * Other animal operations**
- * Land disturbance**

Springfield Phosphorus Removal Progress



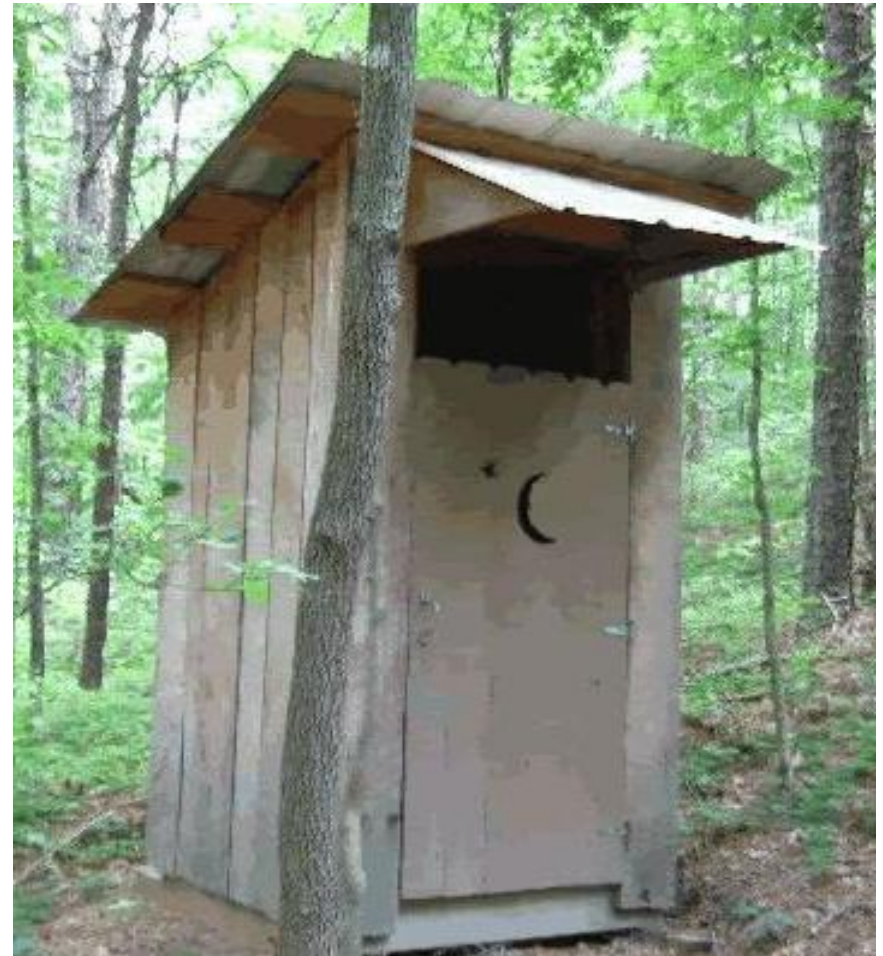




History on Onsite Wastewater Outhouse



Straight Pipe



55-gallon drum



500 Gallon Metal Tanks



Maybe 50' of Lateral Lines




What is the problem?

Health Hazard!

- Effluent can contaminate surface and ground water
- Surfacing septic effluent source of harmful pathogens & bacteria
- Possibility cause unsafe swimming conditions in lakes and streams

**Nonpoint
Source
Pollution**



A photograph of a pond with green algae and a cattail plant. The water is dark green and covered in a thick layer of green algae. A cattail plant with long, thin leaves and a yellow flower head is visible in the foreground. The background shows more of the pond and some dry grasses.

**Nonpoint
Source
Pollution**



Single cell lagoon serving a resort on Table Rock Lake manager's residence and three adjoining rentals. White pipe in upper right of photo is inflow pipe, smaller pipe at lower center is discharge pipe that leads through lagoon berm.



Single cell lagoon serving a small restaurant, restrooms, and owner's home.



Lagoon serving restaurant leaking through southwest side of wall at left, and block removed allowing discharge at right.





Home

Lake is 8 foot below full







Evaluation of Movement of Septic System Effluent from Lake Development Into Near-Shore Areas of Table Rock Lake

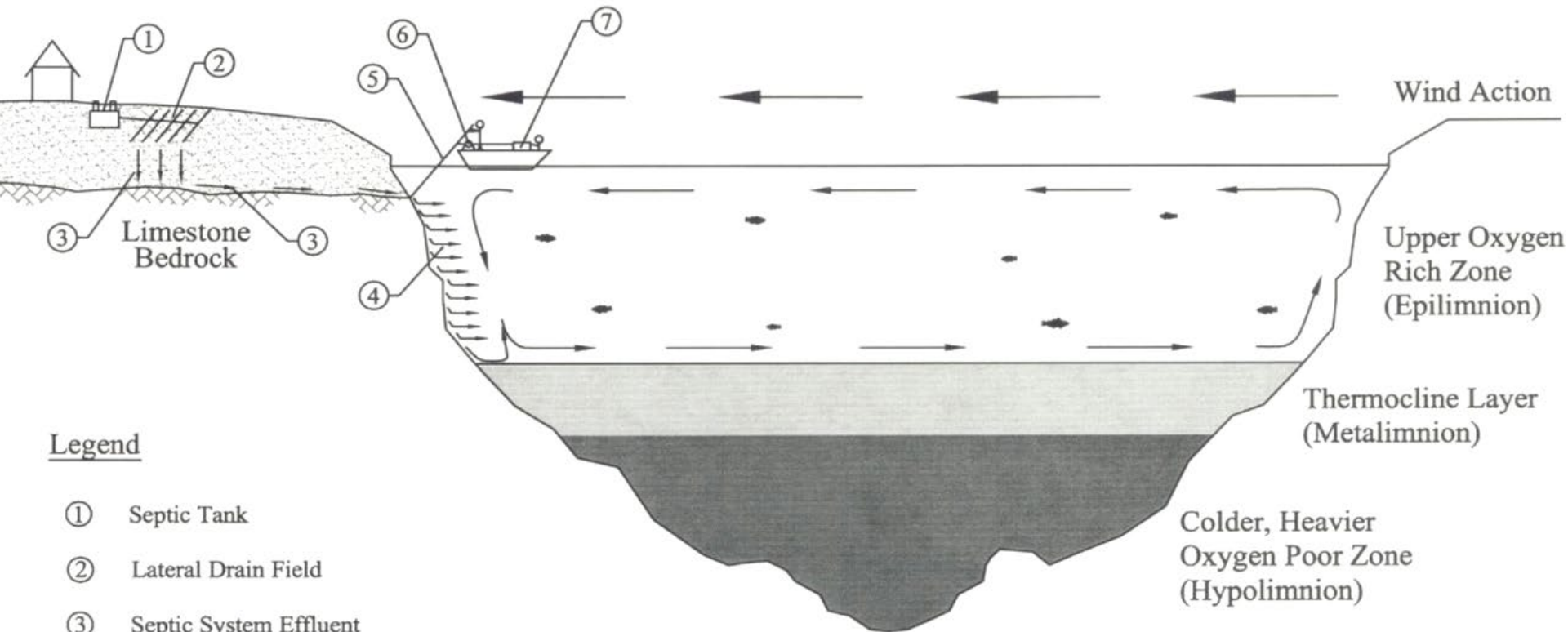
September 2001

Table Rock Lake Water Quality, Inc.
Kimberling City, MO

Midwest Environmental Consultants



Figure 6: Sampling Arrangement and Septic System Effluent Fate and Transport



Legend

- ① Septic Tank
- ② Lateral Drain Field
- ③ Septic System Effluent
- ④ Effluent Mixing By Wave-Induced Currents
- ⑤ Probe
- ⑥ Pump
- ⑦ Fluorometer



Property of Naval Facilities
Serial # [redacted]
Date Rec'd: 04/10/04, 05/04

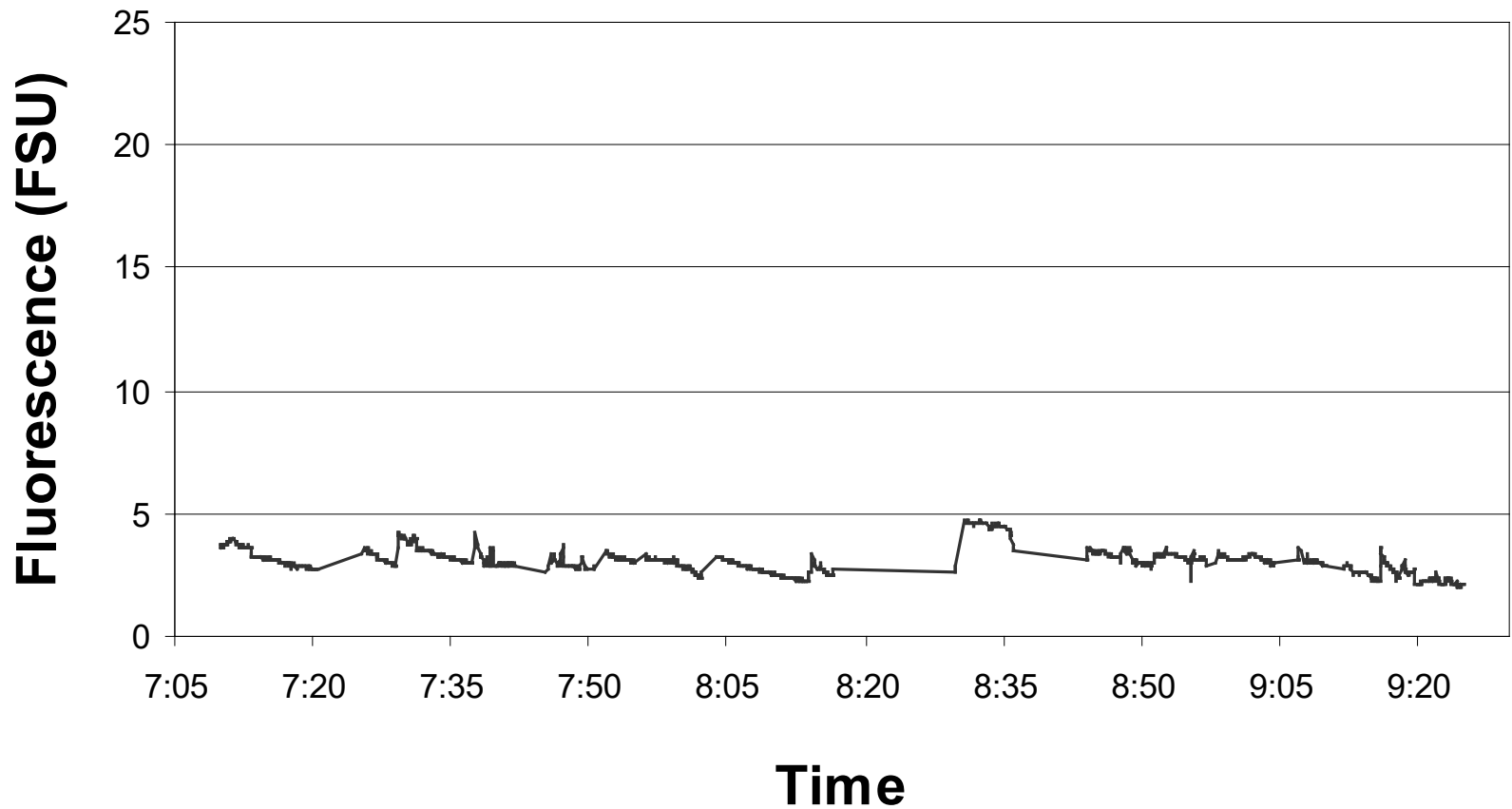
10-AU
Fluorometer

7 8 9
4 5 6
1 2 3
0 0 0

NO
DROP

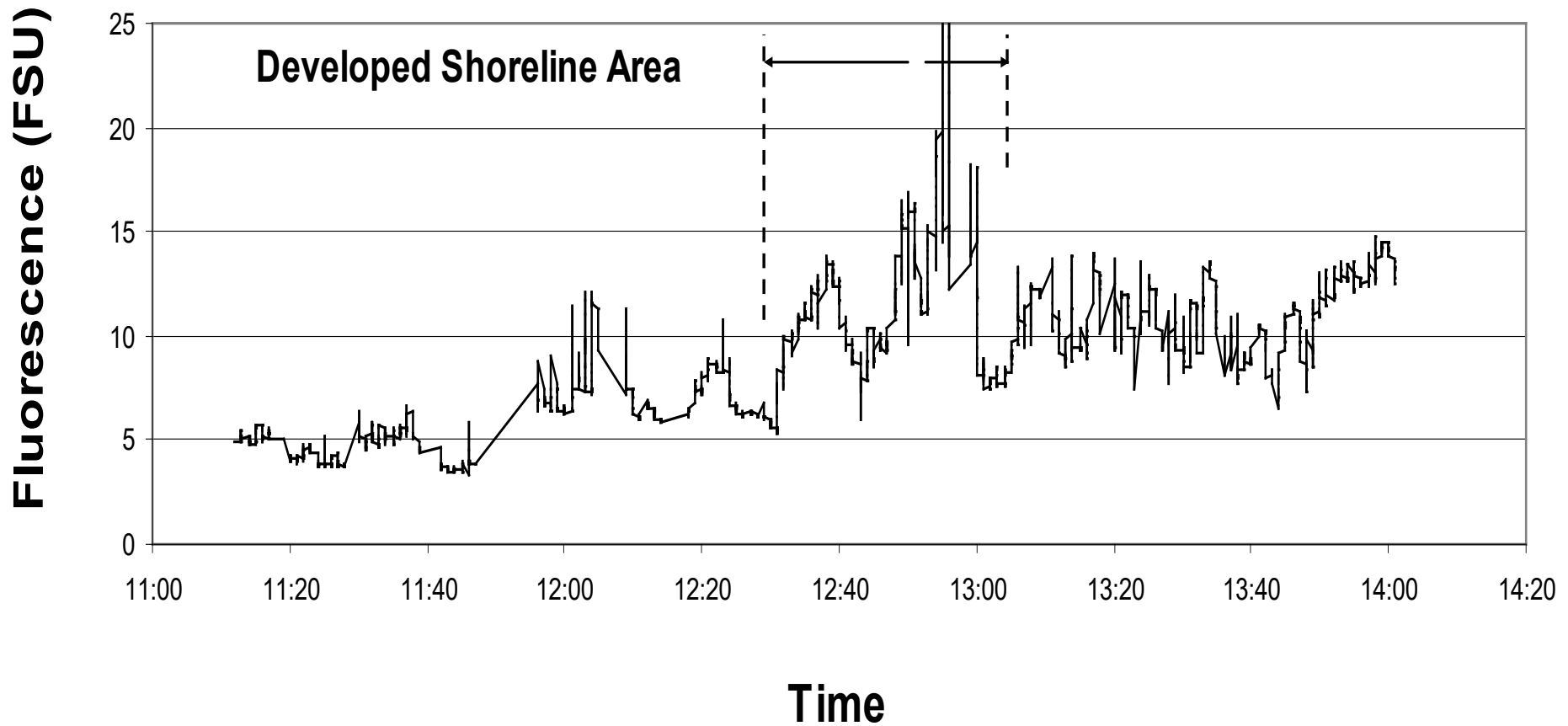
Fluorometry Results

Cow Creek Fluorometry Survey - July 25, 2001

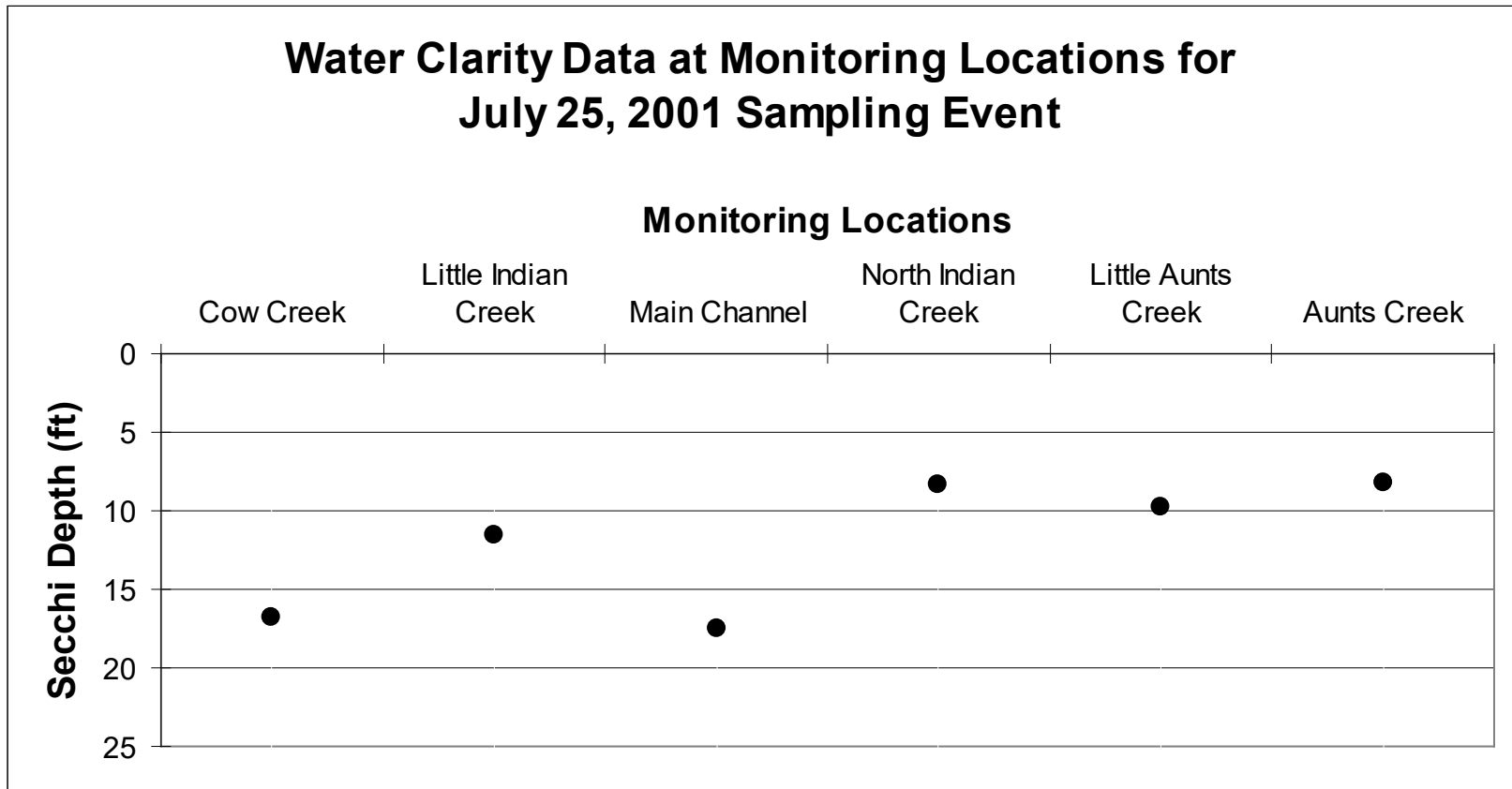


Fluorometry Results

North Indian Creek Fluorometry Survey - July 9, 2001



Water Clarity Data



Straight pipe.....



Small lot – failing system



Deck behind home

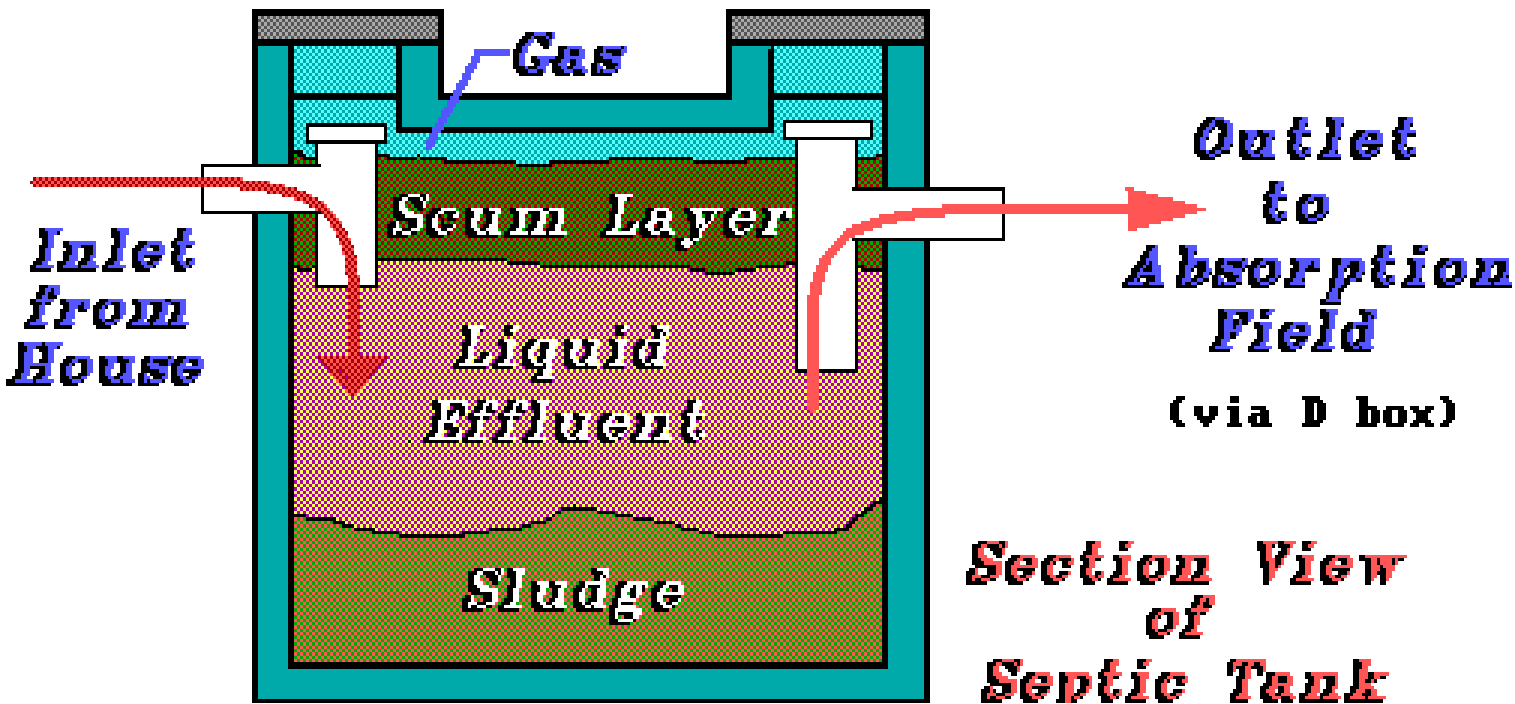


Lift the trap door to...sewage!



Another old metal tank





**Section View
of
Septic Tank**

The solids that settle to the bottom of the septic tank slowly decompose. Gas bubbles given off during this process rise, carrying with them, fats, oils, and greases. The tank outlet is located between these two layers where the clearest liquid is found. Tanks typically should be pumped every 3 years to prevent sludge and scum from clogging the leaching field. Actual pumpout schedules should be based on frequent tank inspections.

Effluent filter

- Keeps solids out of the leach field
- Requires maintenance
- Clogged filter will cause a backup of sewage into the home



Solids can
escape and
completely
clog the
lateral field







Children are playing with Ken & Barbie in raw sewage



Regulation of Onsite Systems

- **Relatively new undertaking for Missouri (1986)**
- **County ordinances starting early 1990's**
 - **Outlawed metal tanks**
 - **Required soil evaluations**
 - **Required permits**
 - **No longer allowed homeowners to discharge untreated or partially treated effluent to the surface or where it would cause contamination**
 - **But in 2002, Stone County would still allow conventional septic systems on almost any type of lot – what was the alternative?**

Timeline: Aug. 2000



- David Casaletto hired by TRLWQ
- Job description:
 - Learn about water quality
 - Find some money
- Tools: A desk and a computer



Timeline: Sept. 7, 2000



- TRLWQ Board Minutes:
 - MDNR Director attends board meeting
 - States that 3 major problems affect TRL:
 - phosphorous from WWTP
 - failing septic tanks
 - litter from animal operations.
 - TRLWQ board decided to work on projects that deal with septic systems and wastewater treatment
 - (This was David's first TRLWQ board meeting)

Timeline: Jan. 29, 2001

- EPA “chat room” listserve
- David reads a post on lake pollution
- David responds, “We have problems with failing septic systems on Table Rock Lake”
- Email response on septic demo projects and to contact a person at Washington University in St. Louis



Wastewater Treatment

National Decentralized Wastewater Treatment \$2M Demonstration Project at Table Rock Lake 2002-2007



*for
Table Rock Lake
Water Quality,
Inc.*

*Through the
efforts of
Senator Kit
Bond*



Three Goals of the Demonstration Project

- 1) Install and test different types of advanced Onsite Wastewater Treatment Systems.



Three Goals of the Demonstration Project

- 2) Develop a management & maintenance program.



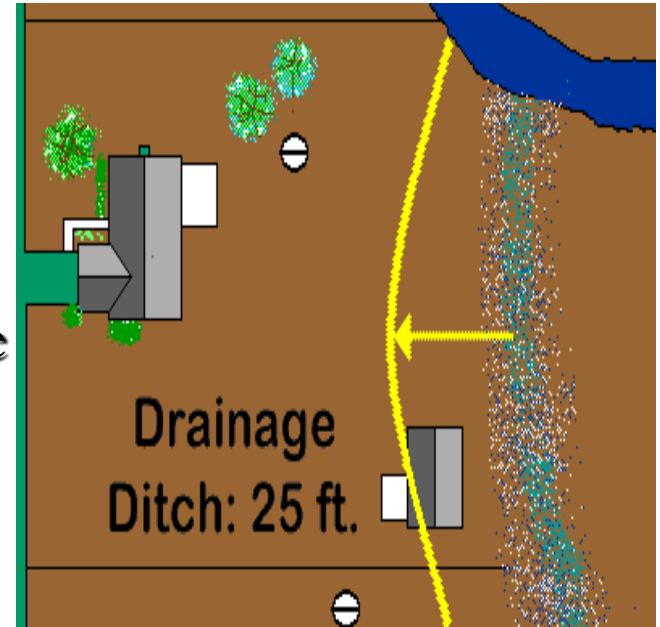
Three Goals of the Demonstration Project

- 3) Identify impediments to widespread adoption of advanced OWTS.



Workplan Outline

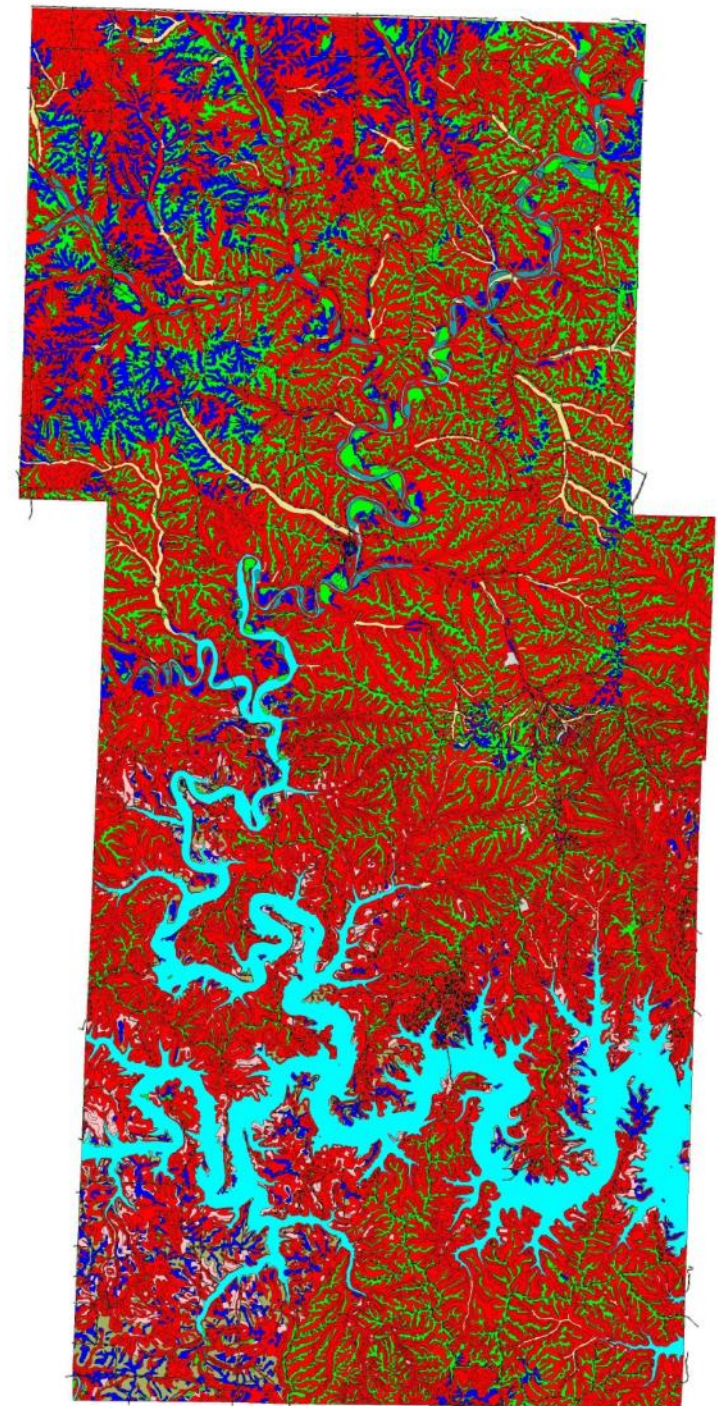
- **Task 1 – Create soil map and establish performance criteria**
- Task 2 – Review existing ordinances
- Task 3 – Install & maintain advanced onsite wastewater treatment systems
- Task 4 – Collect & analyze field data
- Task 5 – Conduct laboratory testing
- Task 6 – Share the information



Stone County Soil Index

RED is “Very Limited”
This means a conventional septic systems has a very little chance of working in these soil conditions

Stone County
Septic Absorption Field



Barry County, Missouri

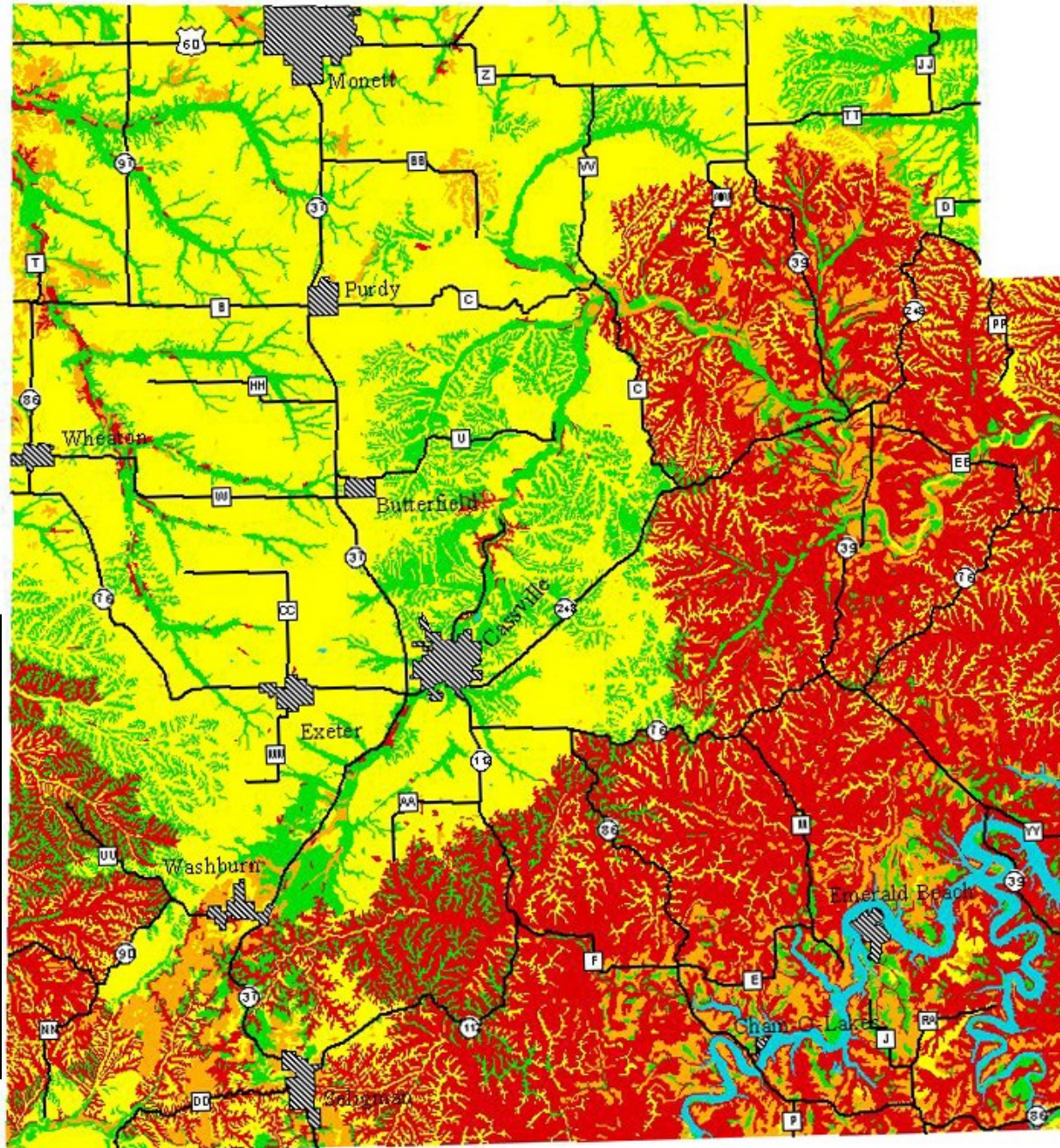
Soil potentials for standard septic systems

Legend

Soil Potential Index Range

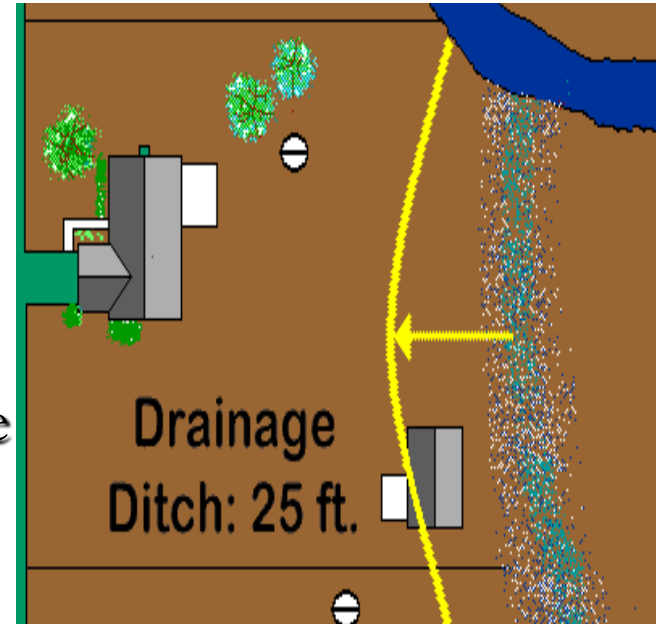
- 76-100 High Potential for standard septic system with few soil limitations
- 51-75 Medium Potential for standard septic system with moderate degree of soil limitations
- 26-50 Low Potential for standard septic system with greater degree of soil limitations
- 0-25 Very Low Potential for standard septic system with greatest degree of soil limitations

Water/Area Lakes



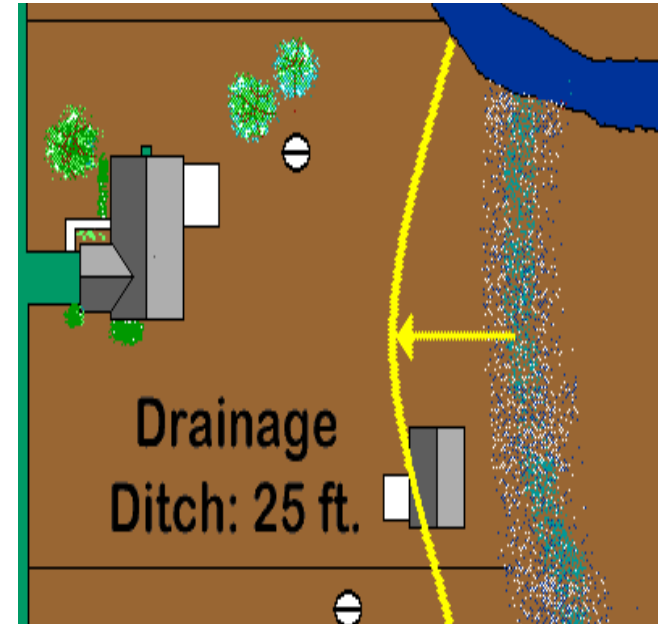
Workplan Outline

- Task 1 – Create soil map and establish performance criteria
- **Task 2 – Review existing ordinances (more on this later)**
- Task 3 – Install & maintain advanced onsite wastewater treatment systems
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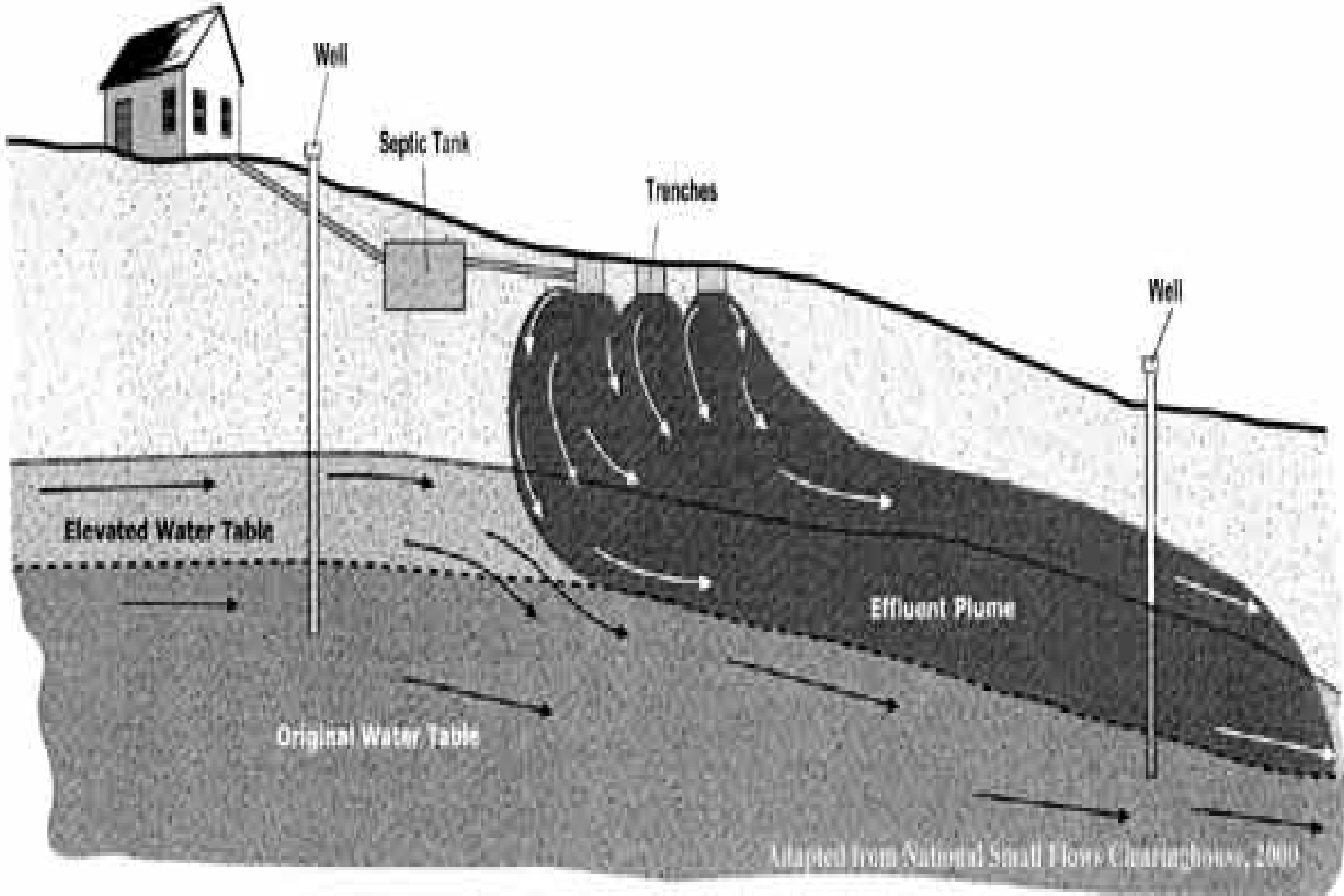


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Conventional Septic System with Lateral Field



Treated Effluent

retroFAST

Peat Moss

Non-treated

Septic Tank

Raw Sewage



Right to left are untreated sewage, septic tank effluent, peat moss filter effluent (the color is tannin from the peat) and RetroFAST effluent.







HOLTBY'S INC.

HOLTBY'S IN 1500

HOLTBY'S

21





1500





IN
HOLTBY
500





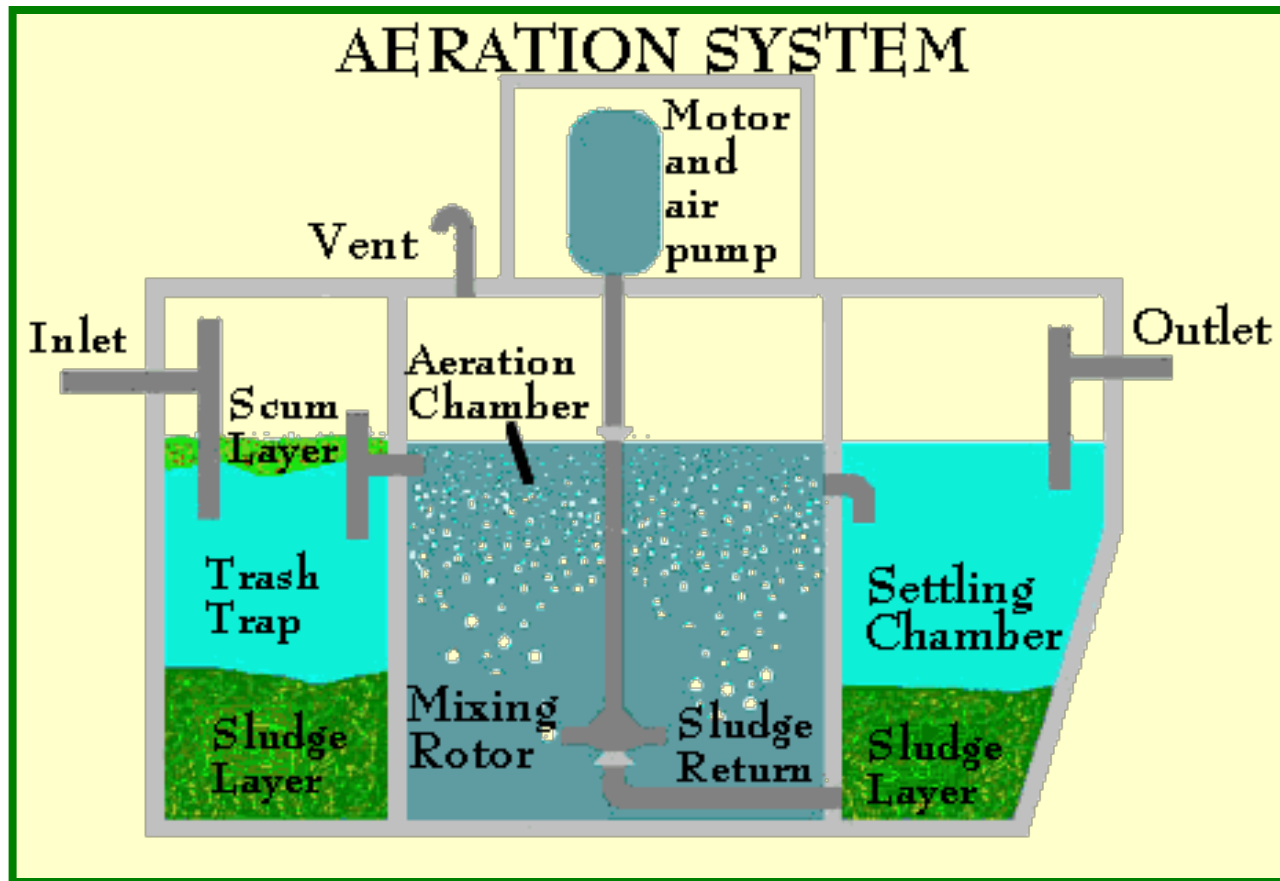




In Many Cases, Imported
Soil Must Be Used For All
of The Soil Dispersal and
Treatment Component

Advanced Treatment Systems

- *Aerobic Treatment Units (ATUs)*





































Treated Effluent

retroFAST

Peat Moss

Non-treated

Septic Tank

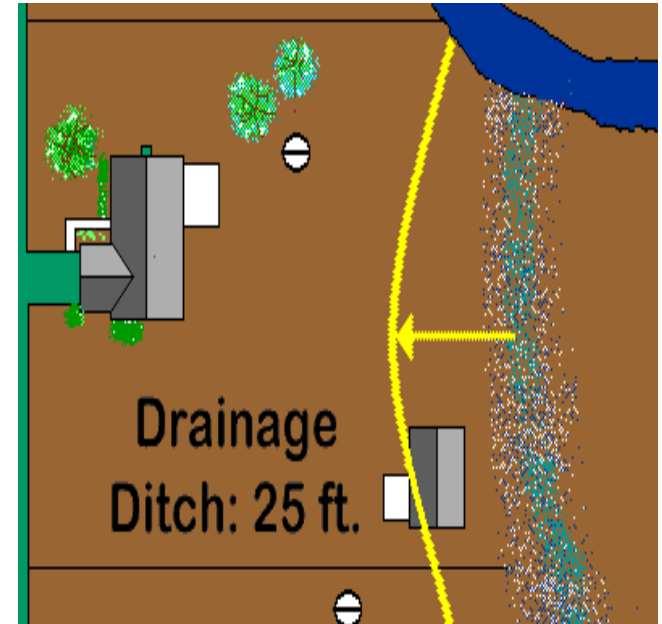
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Why Maintenance is required

- **Short Answer: To assure proper system performance over design life**



Why Maintenance is required

- **Longer answer:
To deal with what
happens in the real
world.**



Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Solids Accumulate**



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 - **Solids accumulate**
 - **Screens & filters clog**



Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Solids accumulate**
 - **Screens & filters clog**
 - **Lines need flushing**



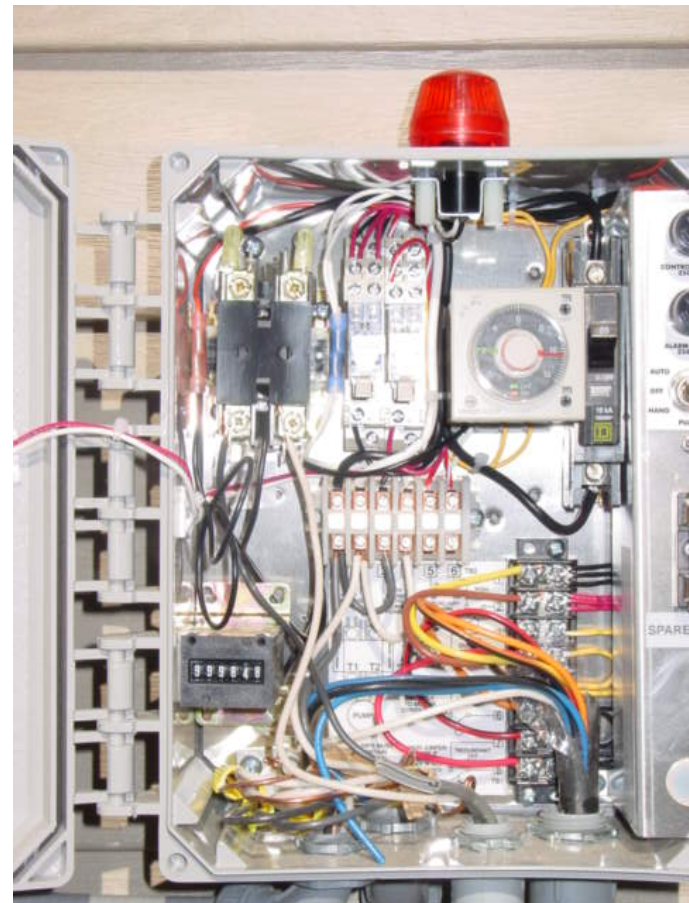
Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Solids accumulate**
 - **Screens & filters clog**
 - **Lines need flushing**
 - **Chemicals have to be replenished**



Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Parts Fail**



Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Parts Fail**
 - **Boxes Settle**



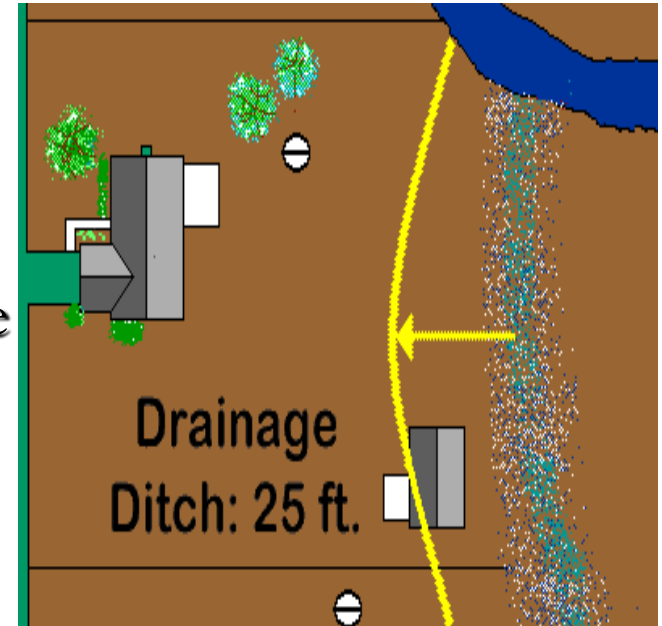
Why Maintenance is required

- **Longer answer:**
To deal with what happens in the real world.
 - **Parts Fail**
 - **Boxes Settle**
 - **Biology Happens !**



Workplan Outline

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*TRLWQ Onsite Wastewater Treatment
Demonstration Project*

Results of Monitoring

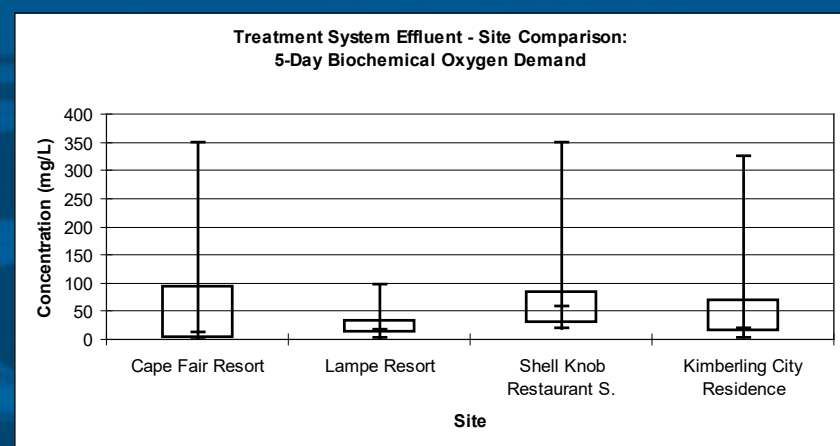
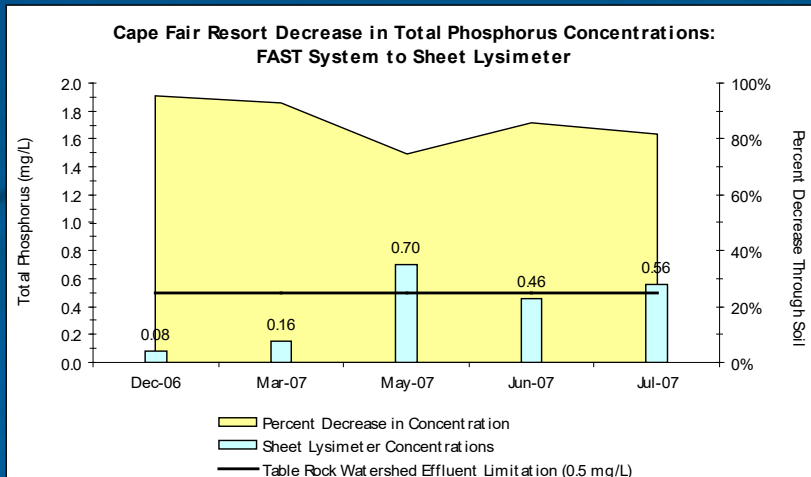
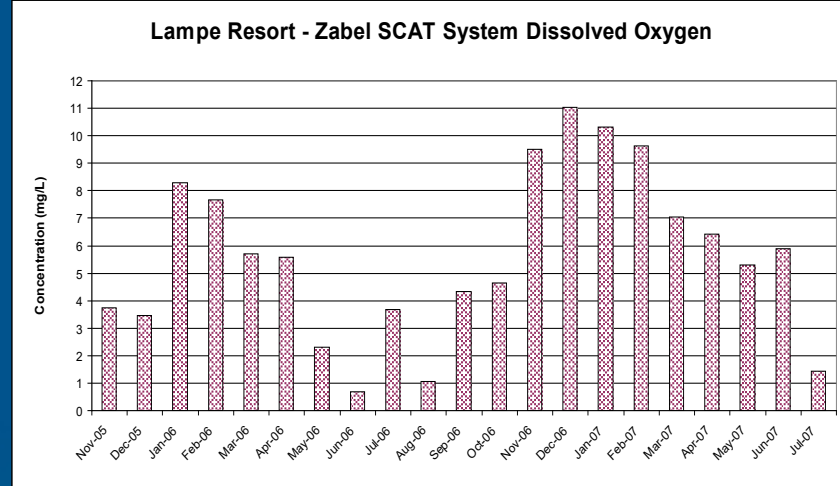
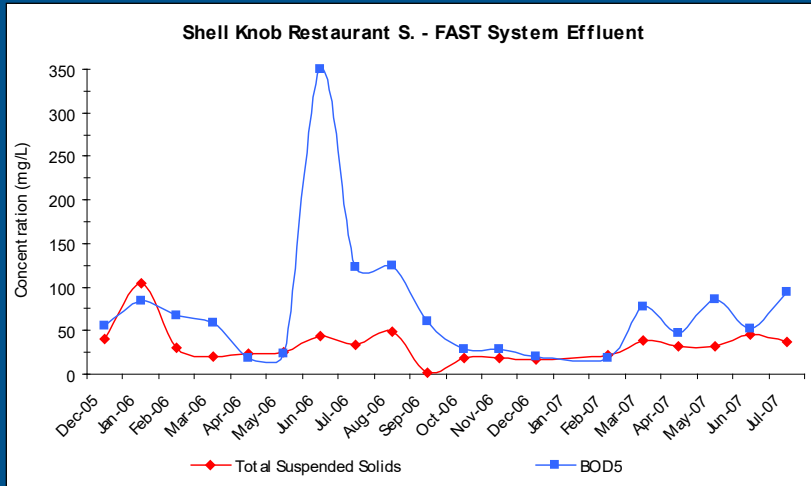




Subsurface Monitoring



The Data....



Average Septic Effluent, Treated Effluent and Subsurface Concentrations

Parameter	Septic Tank	Treated	Sub-surface
BOD₅(mg/L)	162	26.8	3
TSS (mg/L)	46	17.7	NA
Ammonia (mg/L)	5.6	4	0.41
Phosphorus (mg/L)	3	2.7	0.93
Fecal Coliform (colonies/100 mls)	271,000	19,488	140

MAJOR RESULTS FROM THE WASTEWATER DEMONSTRATION & REMEDIATION PROJECT S

1) Acceptance of **advanced treatment of wastewater utilizing drip irrigation in imported soil.**

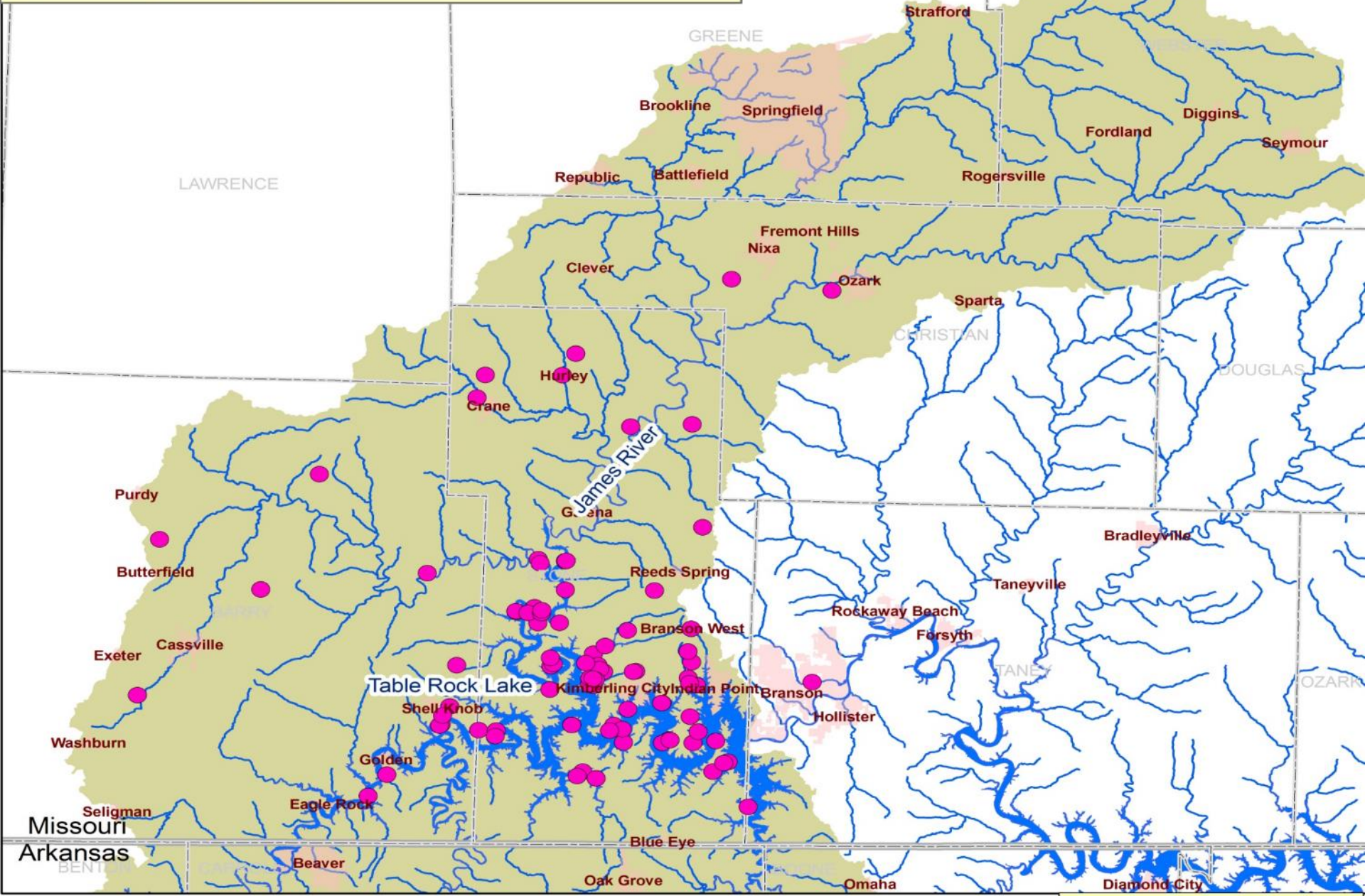


MAJOR RESULTS FROM THE WASTEWATER DEMONSTRATION & REMEDIATION PROJECT S

- 2) Installation and remediation of 100's OWTs in the Table Rock Lake region utilizing 4 different grant projects totaling over \$4 million.



Septic Remediations in Table Rock Lake area
DNR, EPA and MDC- funded, 2002 - 2012
(over 90 participants)



MAJOR RESULTS FROM THE WASTEWATER DEMONSTRATION & REMEDIATION PROJECT S

3) Formation of a nonprofit sewer company and a nonprofit maintenance company to remove maintenance responsibilities **and ownership** from developers and homeowner associations.





Formed in accordance with Missouri Revised Statutes
Not for Profit Missouri Corporation-IRS status 501(c)3
Similar in structure to a rural electric cooperative
Governed by a board of directors elected from the
members by the members
Exempt from Public Service Commission oversight by
Missouri state statute
MDNR approved Continuing Authority



- 3000 service connections
- Owning and operating 35 drinking water and wastewater systems
- Potential for 1200 additional service connections soon
- Excellent relationship with regulatory agencies
- Good acceptance by local government agencies





Ozarks



**Environmental
Services**

Ozarks Environmental Services

- Formed & financed by Ozarks Water Watch April 2016
- New non-profit 501(c)3 corporation
- 16 Employees – fleet of 20 vehicles & backhoe
- Maintains over 160 drinking water & wastewater systems – large & small
- Septic system maintenance – service contracts
- Sales, Service & Installation of grinder pumps
- Total current sales of over \$2.25 million annually



Septic tank pumping!



417-739-4100

Ozarks Environmental Services

Our mission:

To maintain the environmental quality of our lakes, rivers, streams and groundwater and to protect the health and welfare of the public by providing professional drinking water and wastewater treatment services.



MAJOR RESULTS FROM THE WASTEWATER DEMONSTRATION & REMEDIATION PROJECT S

4) Demonstrate that **phosphorus removal can be effectively achieved** through advanced OWTS and drip irrigation used in imported soil around Table Rock Lake.



MAJOR RESULTS FROM THE WASTEWATER DEMONSTRATION & REMEDIATION PROJECTS

- 5) New Stone County Wastewater Ordinance:
 - To require maintenance and renewable operating permits
 - To require septic systems inspection at time of property owner transfer and perform repair or replacement if needed



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES






State Revolving Fund Grant

Septic Remediation Program

Long path to MO SRF Onsite Funds

- Congress approved SRF funds could be used for septic remediation
- In 2005 – MO Clean Water Commission approved \$500,000 in loan funds – could not get contract w/MDNR
- In 2010 MDNR called–SRF grant \$1 million (“green” project)
- No admin \$ available – SRF only construction
- Found admin funds through another government agency (MDC)
- 2015 - New \$1 million approved – at first, no admin \$ again
- MDNR finally allowed loan repayment funds be used

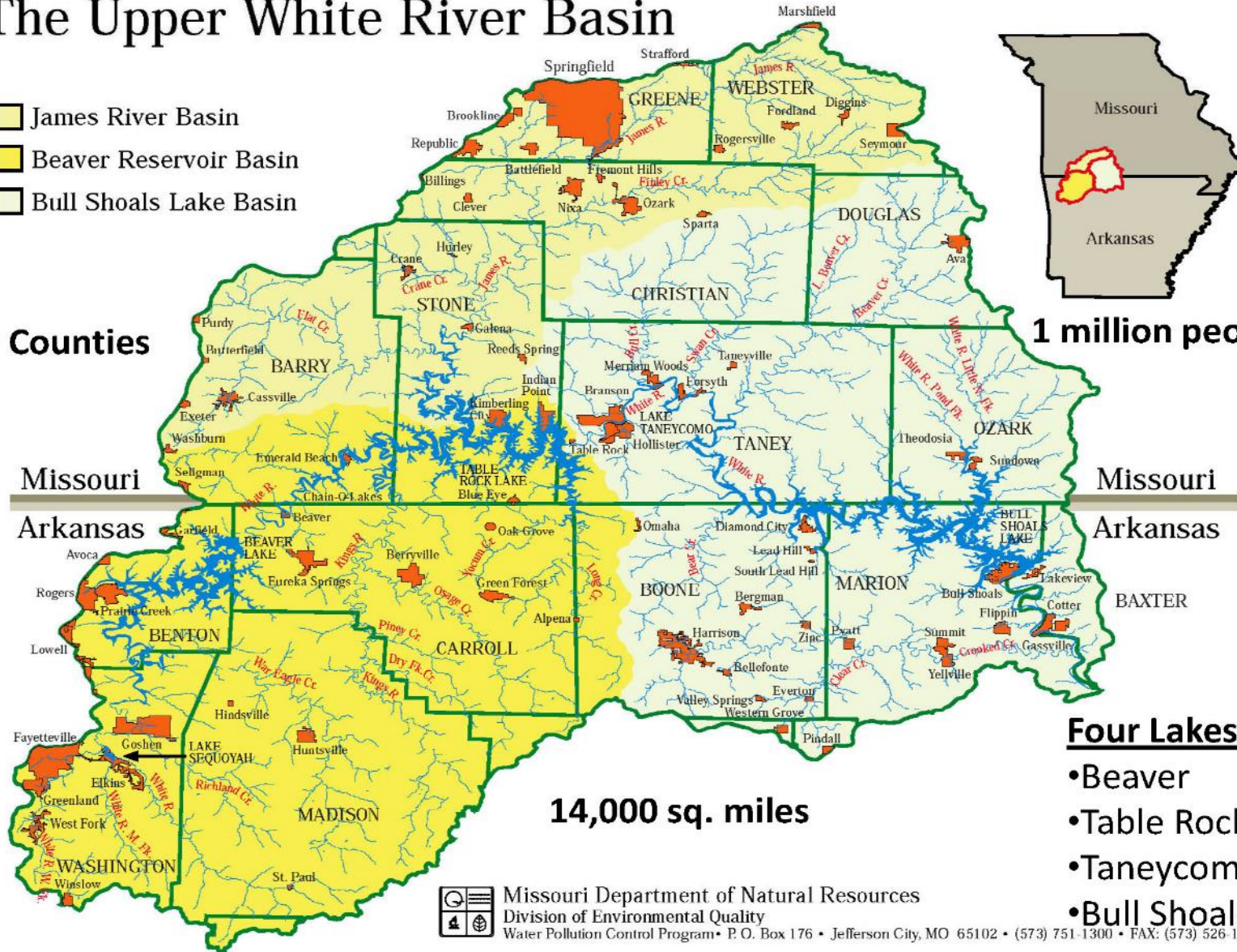
The Upper White River Basin

-  James River Basin
-  Beaver Reservoir Basin
-  Bull Shoals Lake Basin



19 Counties

1 million people

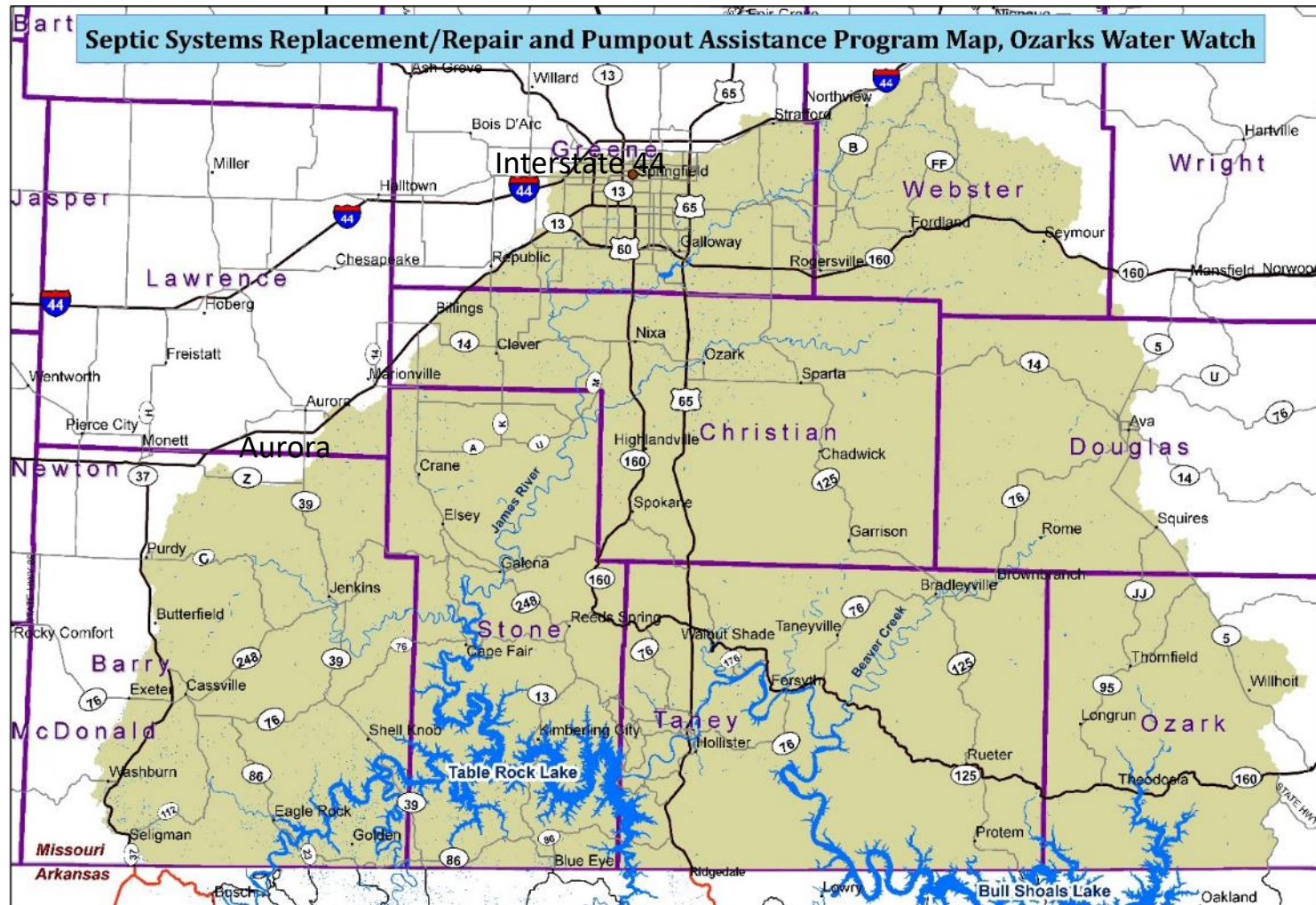


14,000 sq. miles

Four Lakes:

- Beaver
- Table Rock
- Taneycomo
- Bull Shoals

Map of Upper White River Watershed



0 5 10 20 Miles

Map by Gopala Borchelt, Nov 2015

 Lakes, streams
 Project Area



MO Septic Remediation Grant/Loan

\$2 Million in Federal Funds

- 50% Grant – 50% Loan (**zero interest or fees**)
- 2012 – 2015: \$1 Million SRF spent at 138 sites
- 2015 – 2020: \$1.5 Million spent at 171 sites
 - \$500,000 from loan repayment from first round
 - \$1,000,000 from 2nd DNR SRF Grant
- Total: \$2,500,000 spent at 309 sites (Not including owner match)
- \$8,090 average assistance per site

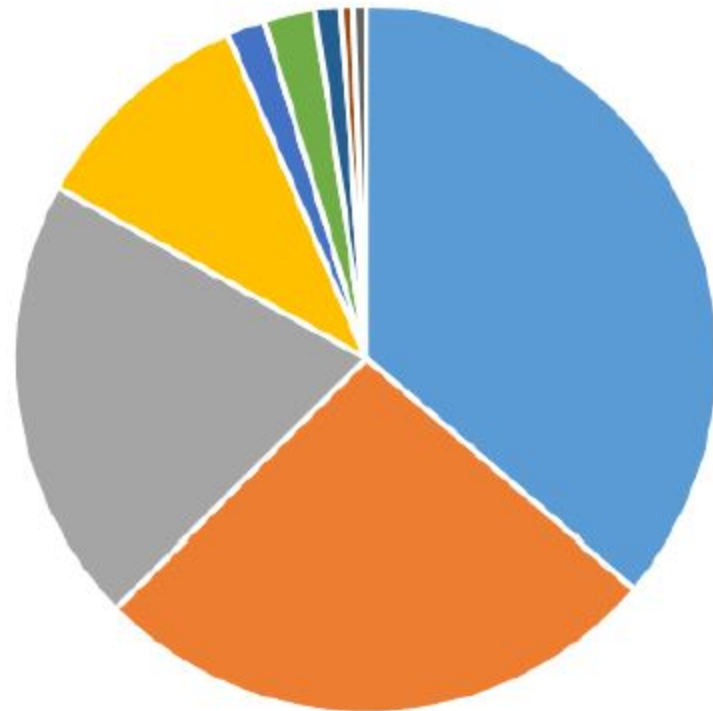


Types of Systems Installed

By Type:

Advanced Drip	62
Conventional	45
LPP	35
Tank Only	18
ATU Tank	3
Laterals only	4
ATU LPP	2
Pipe Repair	1
Lagoon	1

Systems by Type



Who is Qualified?

- Upper White River Watershed of Missouri.
- Septic system must be documented as failing
- Applicant must be the property owner



What does Ozarks Water Watch Provide?

- Application packet: www.ozarkswaterwatch.org
- Step-by-step guidance and information
- **Reimbursement % amount is based on the homeowners income**
- Amount provided is ½ grant and ½ 0% loan not to exceed \$30,000 combined grant and loan – Homeowner pays some amount up front
- OWW pays all county filing fees
- Payment is made to property owner, not installer

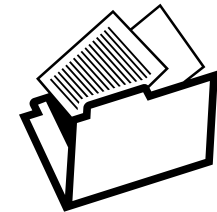


INCOME GUIDELINES based on % of Federal Poverty Level					
Grant% - Loan% - Match%					
Poverty Scale	100%	<150%	151% - 300%	301% - 500%	> 500%
G-L-M		50%-50%-0	40%-40%-20%	30%-30%-40%	20%-20%-60%
Household Size					
1	\$11,880	\$17,820	\$17,821 - \$35,640	\$35,641 - \$59,400	\$59,400
2	\$16,020	\$24,030	\$24,031 - \$48,060	\$48,061 - \$80,100	\$80,101
3	\$20,160	\$30,240	\$30,241 - \$60,480	\$60,481 - \$100,800	\$100,801
4	\$24,300	\$36,450	\$36,451 - \$72,900	\$72,901 - \$121,500	\$121,501
5	\$28,440	\$42,660	\$42,661 - \$85,320	\$85,321 - \$142,200	\$142,201
6	\$32,580	\$48,870	\$48,871 - \$97,740	\$97,741 - \$162,900	\$162,901
7	\$36,730	\$55,095	\$55,096 - \$110,190	\$110,191 - \$183,650	\$183,651
8	\$40,890	\$61,335	\$61,336 - \$122,670	\$122,671 - \$204,450	\$204,451

For families/households with more than 8 persons, add \$4,160 for each additional person.

What does the property owner provide?

- Signed Application and Terms of Agreement
- Failing Onsite Observation Form Completed by Septic Regulator
- Proof of Ownership and Identity
- 3 Bids from Licensed Installers
- Copy of Inspection, Soil Test & County Permit
- Final Invoice, signed & dated
- Photos of project in process
- **Signed Deed of Trust** (if taking loan)
- Maintenance Agreement (Advanced systems)



Important Notes!!!

- No construction until approval is received from MDNR
- Property can't be sold before this process is complete
- The reimbursement is made to the property owner after completion of system
- The property owner pays Installer



Examples of Replaced Systems



Collapsed Metal Tank



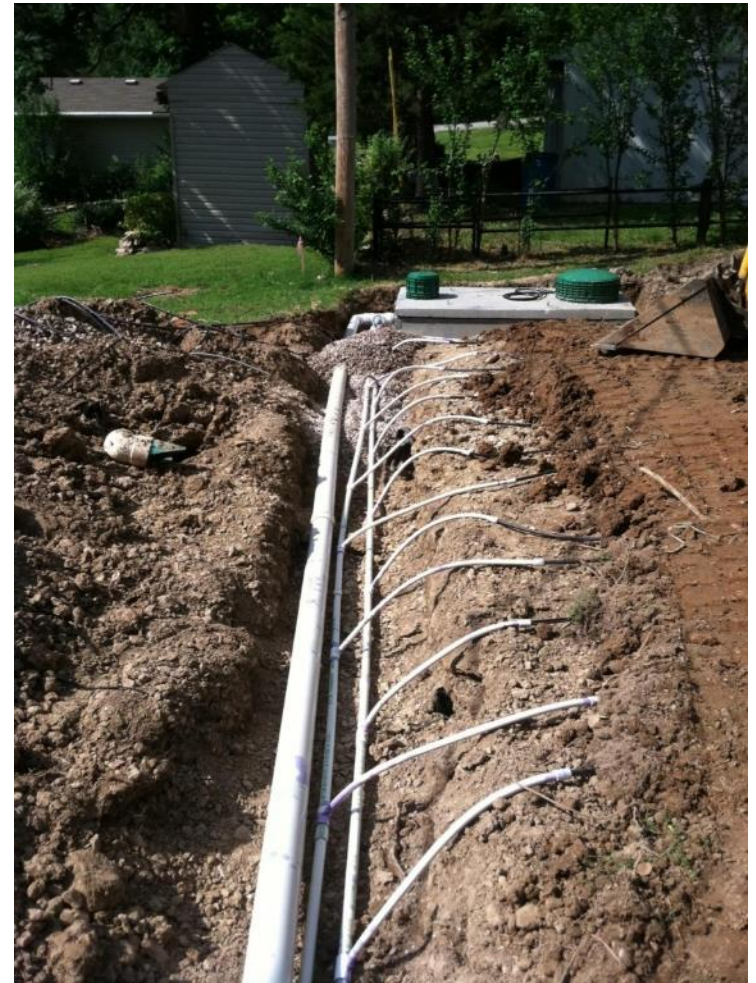
Advanced system with pump tank



Old Rusted Tank



Drip Laterals in Imported Soil





Started with this.

Ended with this.





Solid Bedrock

Advanced System with Drip Field



AR Septic Remediation Program

- Started January 1, 2021 in Beaver and Illinois Watersheds
- \$1 Million State Revolving Funds (SRF) per watershed
- Agreement with Arkansas Natural Resources Commission (ANRC)
- Separate 3-year agreement for administration costs (Not SRF funds – ANRC found separate pot of \$\$\$)
 - Salary for full-time employee
 - Mileage
 - Promotion & office supplies

Straight Pipe

“While I was talking with the homeowner, the puppy was DRINKING from the cesspool. The homeowner had teary eyes when I told him he was receiving a 90% grant. “Bless you good people” was what he kept repeating....”



AR Septic Remediation Program



Ozarks Water Watch is a non-profit organization dedicated to maintaining and improving the water quality of the Upper White River Basin. The watershed includes 4 major impoundments, three major rivers and numerous smaller lakes and streams crisscrossing over 14,000 square miles in 19 counties in southwest Missouri and northwest Arkansas.

With your help, we will work together to make Beaver, Table Rock, Taneycomo and Bull Shoals lakes the four cleanest man-made lakes in North America!



The Illinois River Watershed Partnership works to improve the integrity of the Illinois River Watershed through public education, outreach, and implementation of conservation and restoration practices throughout the watershed.

Our vision is that the Illinois River and its tributaries will be a fully functioning ecosystem, where ecological protection, conservation, and economically productive uses support diverse aquatic and riparian communities, meet all state and federal water quality standards, promote economic sustainability, and provide recreational opportunities.

Septic Remediation Program Overview

This program offers financial assistance to homeowners residing in specific geographic regions to repair and/or replace failing septic systems. The program is funded by The Arkansas Department of Agriculture, Natural Resources Division.

Eligibility requirements:

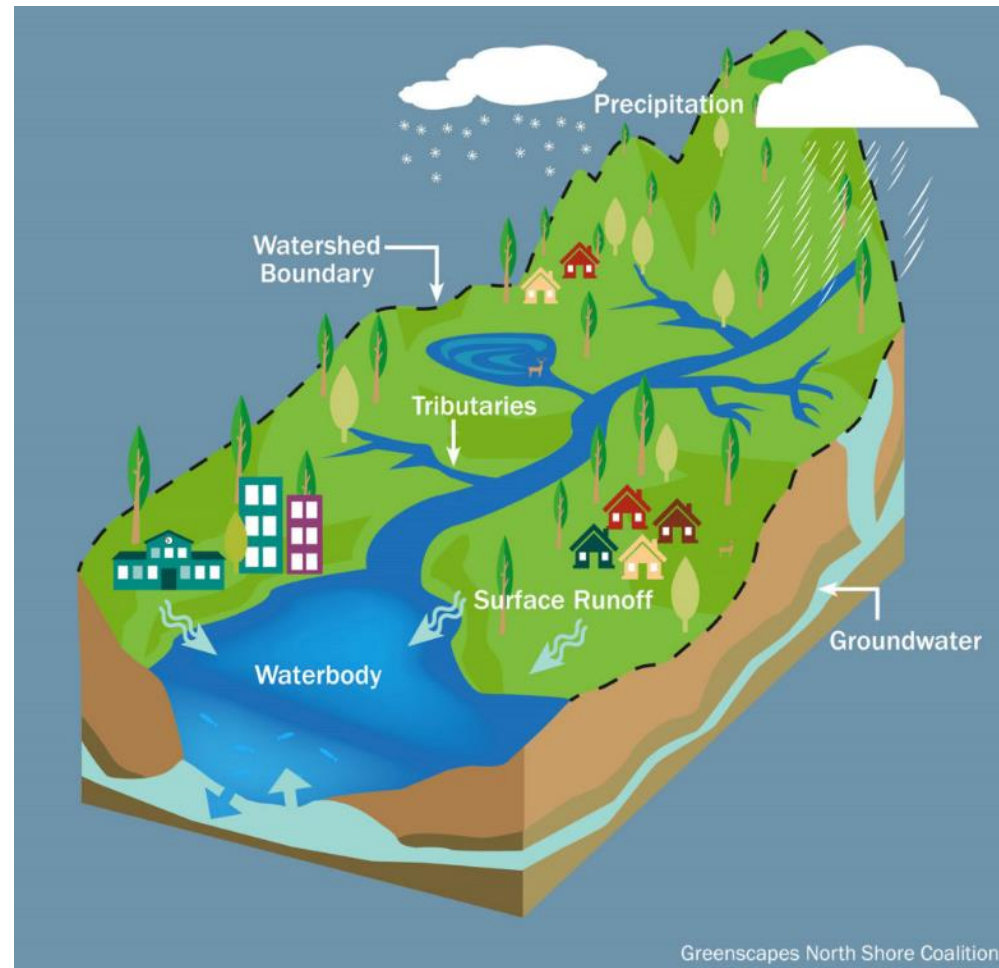
- **Septic system must be deemed failing by the County Health Unit** of the Arkansas Department of Health
- Must reside in either the **Illinois River Watershed** or the **Beaver Reservoir Watershed**

Assistance available:

- **Zero-interest loan** payable over up to 10 years for up to \$30,000 to repair and/or replace a failing septic system
- A percentage of the repair and/or replacement cost may be a **grant** to the homeowner, depending on income. Grants are **free money** to the homeowner and **do not require repayment**.
- Differs from MO SRF – there is no required upfront \$\$\$ from owner in AR

What is a watershed?

A watershed is a defined area of **land** where all the water (generally rain or snow but also any other water on the ground – like household water, agricultural water, wastewater, etc.) drains into a body of water, such as a creek, pond, lake, river, bay, or even ocean. Watersheds are also known as drainage basins.

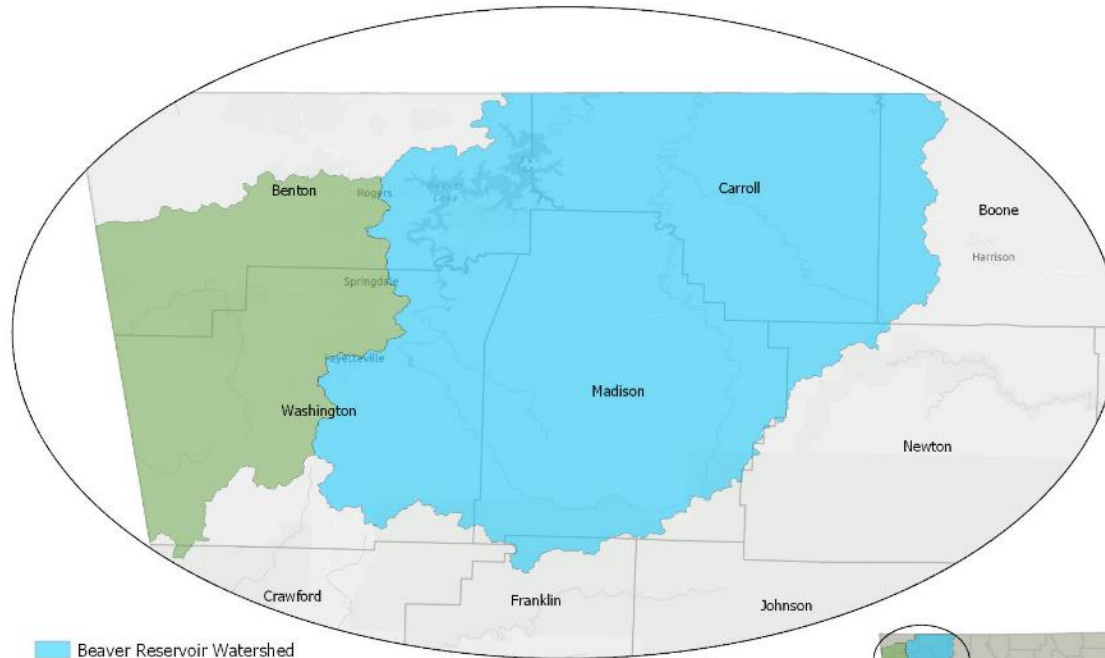


Greenscapes North Shore Coalition

North and South Rivers Watershed Association

Locate your watershed at

https://watersheds.cast.uark.edu/find_your_watershed.html



- Beaver Reservoir Watershed
- Illinois River Watershed
- County Boundaries



The Upper White River Basin

- James River Basin
- Beaver Reservoir Basin
- Bull Shoals Lake Basin



19 Counties

1 million people

Missouri

Arkansas

Missouri

Arkansas



14,000 sq. miles

Four Lakes:

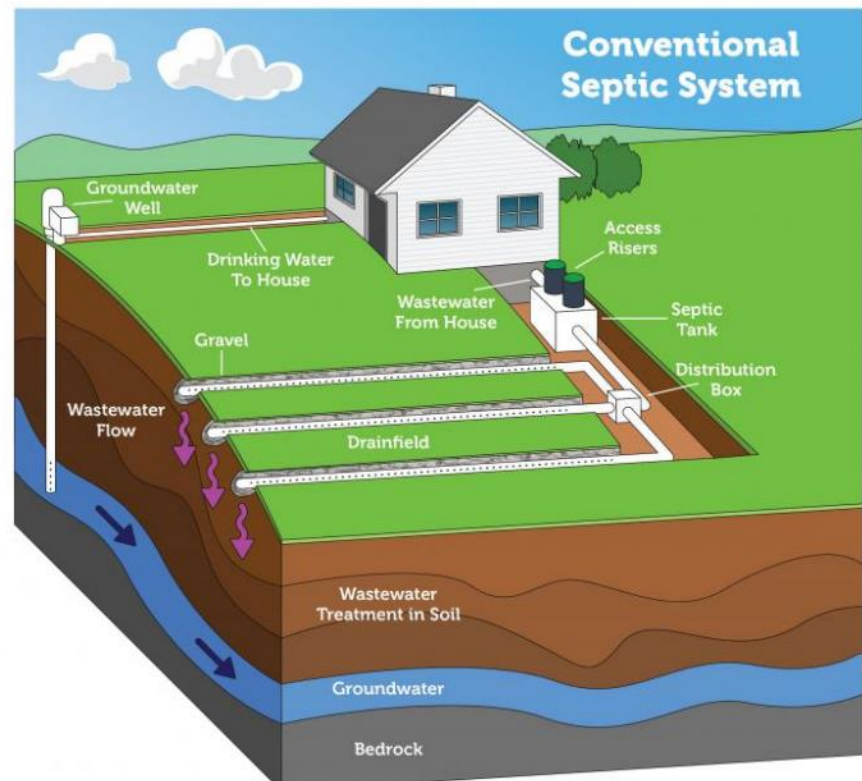
- Beaver
- Table Rock
- Taneycomo
- Bull Shoals

What does a septic system have to do with the watershed?

Septic failures can lead to water quality and human health concerns.

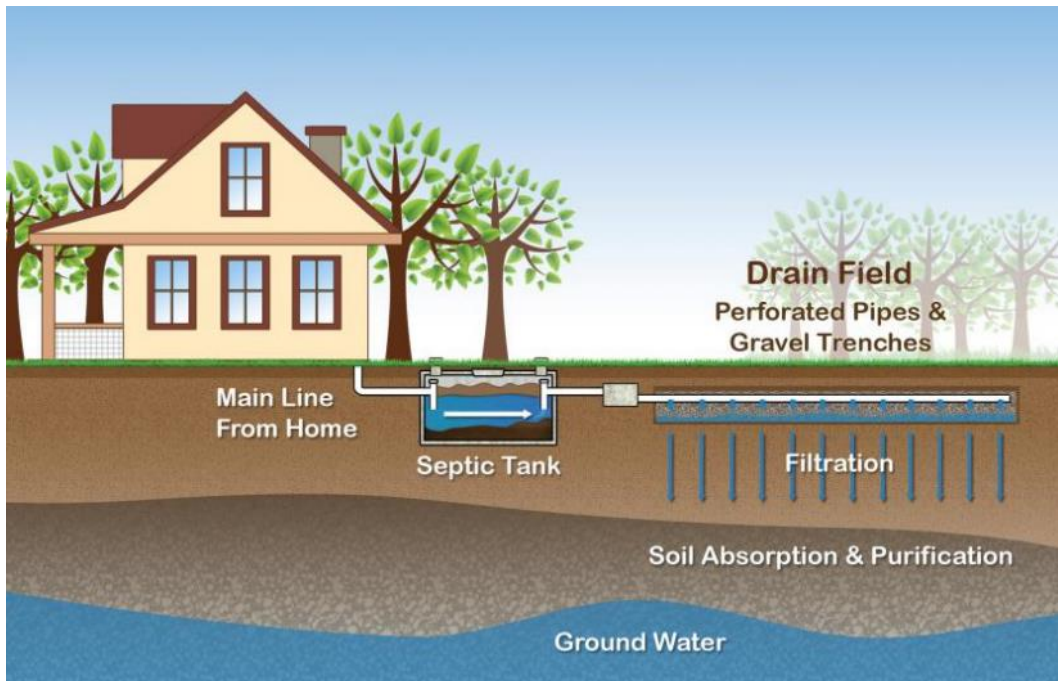
Arkansas waterways are monitored regularly to determine if water quality supports designated uses – such as recreation, drinking water, fishing and other uses.

Portions of the Upper White River/Beaver Lake and the Illinois River are on the State's List of Impaired Waterbodies and septic failures are considered contributing factor to these impairments, particularly fecal coliform bacteria and phosphorus.



Anatomy of a Conventional Septic System

A conventional septic system consists of a septic tank and a drain field (also called a leach field).



All of the wastewater from the home flows through the main line into a **septic tank**.

Household waste is treated naturally inside the tank, separating into three layers: scum, wastewater, and sludge. Scum and sludge that cannot be broken down need to be **pumped** out. Wastewater flows out of the tank and into the **drainfield**.

Wastewater slowly trickles out of perforated **pipes** in the drainfield through layers of gravel and soil, which act as a biological **filter**. This process treats the wastewater before it re-enters the **ground water**.

Maintaining a Septic System

Regular septic maintenance is critical for the functioning of a system, for the health of the environment, and for your **pocketbook!**



Know where it is! Have your system inspected by a professional! Be mindful of parking, landscaping, and erosion in your yard – maintain your drainfield!

Pump regularly! Minimum 3-5 years, but this also depends on the size of the system and how many people live in the home. \$250-\$500 every few years for maintenance is a bargain compared to *thousands* of dollars in costly repairs of failures.

Think at the Sink! Learn about how to properly dispose of household wastes - not everything that *can* go down the drain *should* go down the drain!

Watch for signs of failure! Foul odors, wastewater backup in household drains, bright green spongy grass in the drainfield, pooling water in the drainfield or basement are all signs of problems that should be addressed immediately!

Be a Responsible Septic Owner



Avoid putting these things down the drain

- Cooking grease
- Oils
- Coffee grounds
- Household chemicals

Limit the use of a garbage disposal



Never flush

- Paper towels
- Baby or flushable wipes
- Pharmaceuticals
- Cat litter
- Cigarette butts
- Diapers
- Condoms or feminine hygiene products



Protect the field

- Never park or drive on the drainfield
- Don't plant trees or shrubs too close to the field

Regular Maintenance

- Have the tank inspected and pumped on a regular basis (on average every 3-5 years).

Rules for Septic Systems in Arkansas

Individual Wastewater Systems (septic systems) are permitted by the Arkansas Department of Health (ADH).

- The Arkansas Department of Health has regulated and permitted septic systems in the state since 1977.
- If located within 300ft of municipal sewer, then no permit will be issued when connection can be made to the main without crossing another person's property.
- There must be suitable absorption areas (i.e. soil structure to balance water movement with treatment). The construction permit for a septic design requires soil morphology, hydraulic conductivity and seasonal water table analyses.
- The construction permit must also include lot dimensions, system design, system layout and other information required by ADH or its authorized agent.
- A septic design must be permitted **prior** to construction for new systems or alterations, repairs, or extensions of existing systems
- When advanced systems (meaning those with additional treatment capability that allow for use of restricted leach field area or substandard soil structure) are installed, a Maintenance and Monitoring Contract along with an MOA signed by the homeowner are required for the operation permit to be issued.

For most of the State, there are no inspection requirements. However, unincorporated Washington County does have inspection requirements for properties with septic systems prior to the sale of the property.

How the AR Septic Remediation Program Works

We need confirmation from the County Health Unit that the system is failing. This generally requires an inspection of the property and system by an Environmental Health Specialist. Failures are commonly caused by ruptures in the tank or breakdowns in the distribution box or lateral lines. Repairs can range from replacing broken components to a complete septic system overhaul.

Our program funds up to \$30,000 per project. All of this \$30,000 is available to the homeowner as a **zero-interest loan** payable up to over 10 years (for example, a \$30k loan paid over 10 years = \$250/month).

Depending on the homeowner's *taxable* income, a percentage of the total project cost can be a **grant** – which is **free** money that does not require repayment.

This program works on **reimbursement**, so funds will be reimbursed to the homeowner once the septic installation or repair has been completed. We aim to turn around reimbursements in as little as 3 weeks.

ANNUAL INCOME LEVEL	GRANT (no repayment)	0% INTEREST LOAN
less than \$20,828	90%	10%
\$20,829 - \$31,242	70%	30%
\$31,243 - \$41,657	50%	50%
\$41,658 - \$62,485	30%	70%
\$62,486 - \$83,314	10%	90%
more than \$83,314	0%	100%

IMPORTANT

We must connect with prospective program applicants before any construction has begun.

This program does **not** fund septic installation for new construction.

Beaver Reservoir Watershed

Our program has had 65 inquiries.

- 12 Approved projects
 - Only 2 is completed because septic installers are considerably behind, 2-3 months from approval to bid to actual installation.
 - **10 of the 12** will receive a **90% grant**.
- 4 projects are 'soft approved', meet all the criteria and we are waiting on paperwork
- 21 projects are presently being determined for eligibility
- 15 projects that are leads, not progressing at the moment for various reasons
- 24 Ineligible projects, outside of the watershed

Outreach Meetings

- Realtors
- Installers
- Regulators
- Decision makers
- Lenders

STRP Completed Project Farmington, AR – July 2021

Project Summary:

- Significant effluent seepage in yard and backup in the home
- Tank pumped far too frequently – 3 times in the 5 months
- Struggling to budget for the needed septic repair.
- This program allowed them to move forward ASAP with the repair.



Connect with us for more information!



for addresses in the **Beaver Reservoir Watershed**
Shelly Smith, Program Manager
shelly@ozarkswaterwatch.org
479-866-7220



for addresses in the **Illinois River Watershed**
Matt Taylor, Program Manager
matt@irwp.org
479-790-3465



**Yes, there is a pot at the
end of the rainbow!**

Links to supporting information

- [Table Rock Demonstration Project Complete Final Report to EPA](#)
- [Table Rock Demonstration Project Report Brochure](#)
- [Evaluation of Movement of Septic Effluent into Table Rock Lake](#)
- [Application/Information Packet for Missouri SRF Septic Remediation](#)
- [Application/Information Packet for Arkansas Septic Remediation](#)
- Ozarks Water Watch Website www.ozarkswaterwatch.org
- Ozarks Clean Water Company Website www.ozarkscleanwater.org
- Ozarks Environmental Services Website www.ozarks-env.org
- Email for David Casaletto dcasaletto@ozarkswaterwatch.org



Thank You!

www.ozarkswaterwatch.org

OZARKS WATER WATCH™
UWRB:Upper White River Basin Foundation

