

Lessons Learned on Replacing OWTS in Missouri with Grant Funds

Tammy Trantham
Executive Director



Missouri
Smallflows
Organization

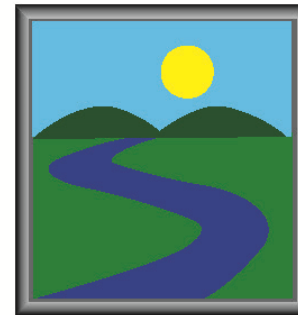
*Materials being presented do not represent the opinions of NOWRA.

Greene County ARPA Funding

- Awarded to James River Basin Partnership
- Amount: \$133,000.00
- Spent by December 31, 2024



Partners



**Missouri
Smallflows
Organization**



Project Scope

- Provide financial assistance to low-income families to remediate their failing septic system
- Maximum award amount = \$18,000
- Homeowners may contribute to amount (based on tiered scale for income)
- Goal is to improve water quality of Greene County by remediating known failing septic systems



Application Process

Online Application

- Cognito Forms
- Secure submittal of documents

Grant Committee Review

- Review of documents submitted
- Evaluate need based on income

Accept/Reject Application

- Contact made to Applicant on decision

Inspection by Greene County

- Observation Form to show failure by county inspector



Homeowner

- Soil Evaluation by certified Onsite Soil Evaluator
- Obtain 3 bids from certified Onsite Wastewater Treatment System Installers
- Homeowner selects contractor
- Maintenance agreement, if advanced treatment system



Contractor

- Provide Bid to Homeowner
- Homeowner selects contractor to work with
- Reviews and signs contract with H2Ozarks and Homeowner
- Installs system
- Passes county regulatory inspection & homeowner signs off on work
- Payment is made to contractor



Project #1

Failures:

- Collapsed Septic Tank
- Root Intrusion in Lateral Lines
- “Old Faithful” Roof Vent



Project #1

Replacement:

- Low Pressure Pipe
- Cost: \$18,000

- 3-bedroom home
- Designed for 360 gallons/day
- Maintenance Agreement



Project #2

Failures:

- System not accepting effluent during wet or saturated conditions – surfacing in backyard
- Existing tank was under deck



Project #2

Replacement:

- Pump to gravity
- 3-bedroom home
- 360 gallons/day
- Cost: \$22,500
- Grant: \$18,000



Project #3

Failures:

- Backing up into house
- Lateral line root intrusion
- Surfacing effluent around tank



Project #3



Replacement:

- Low Pressure Pipe
- 4-bedroom house
- 480 gallons/day

- Cost: \$18,000



Project #4

Failures:

- Surfacing effluent in yard
- Grey water was diverted to separate tank
- Challenging soils and low slope



Project #4



Replacement:

- Drip Irrigation
- 3-bedroom home
- 360 gallons/day

- Maintenance Agreement
- Cost: \$25,500
- Grant: \$18,000



Project #5

Failures

- Collapsed metal tank
- Directly draining into soil around collapsed tank



Project #5

Replacement

- First AES system in the county
- Tight lot
- Educated county staff on installation for future systems

- 3-bedroom home
- 360 gallons per day
- Cost: \$21,200
- Grant: \$18,000



Project #6

- Failing gravity system
- Notice of Violation with county
- Effluent discharging onto neighbor's yard



Project #6

- Pump to gravity system
- 3-bedroom home
- 360 gallon/day

- Cost: \$17,581.72
- Grant covered full cost.



Project #7

- Failing system
- Replacement:
 - Pump to gravity treatment
- Grant can only cover \$5000 of project
- Applicant securing outside funding for remaining costs



Lessons Learned:

- Seed/Straw to include in bid
- Grant Committee helped reseed one project area
- Make sure contractor & engineer have visited the site.



Lessons Learned:

- Checklist for Contractor
- Checklist for Homeowner
- Elderly not able to do online application
- Education to Homeowner pre- and post-construction



Project Summary

- Additional Funds needed
- Projects are pricey as you are working with limited spacing and challenging soils.
- All sites were located in suburban Springfield.

Total Funds for Replacements:
\$127,598.72

Projects completed: 7



Lessons Learned from using Grant Funds

Questions?

Tammy Trantham

Executive Director

Missouri Smallflows Organization

Email: contact@mosmallflows.org

Phone: 417-631-4027



**Missouri
Smallflows
Organization**

