



2021-2022 SPRINGS FUNDING REPORT

PREPARED BY THE
FLORIDA SPRINGS COUNCIL



Photo of Mermaid/Jonathan Spring on the Santa Fe River

ABOUT THIS REPORT

To better understand the scope of springs water quality problems and how effectively springs restoration funding is being used, the Florida Springs Council analyzed the 2021-2022 springs projects proposed for funding by Florida's water management districts. Our analysis paints a bleak picture of the future of Florida's most iconic springs. There are three primary takeaways which we will discuss in more detail on the following pages:

1 We can't spend our way out of Florida's water quality crisis.

It is like trying to empty the ocean with a spoon. The legislature must immediately pass laws that require agricultural producers and local governments to significantly reduce existing nutrient pollution and prevent future loading.

2 We must increase appropriations for springs restoration projects.

Current springs funding levels are only a miniscule fraction of what is needed to achieve water quality goals established by Florida law, even if that funding were directed toward cost-effective projects.

3 We need to fund better projects that target the major sources of pollution.

Water Management Districts are either unable or unwilling to propose cost effective springs restoration projects which target the major sources of nutrient pollution. Springs funding is being wasted on ineffective projects, some of which are reported to have no benefit to spring water quality or flow. Legislation should be passed to allow other entities, like the Department of Agriculture and Consumer Services (DACCS) and accredited land trusts, to directly submit project proposals to the Department of Environmental Protection for consideration for springs restoration funding.

WE CAN'T SPEND OUR WAY OUT OF FLORIDA'S WATER QUALITY CRISIS

Our analysis finds that even if there are no new sources of pollution, at the current rate of nitrogen reduction (48,509 lbs/year of nitrogen) claimed for the 2021-2022 springs projects, it will take 217 years to achieve Outstanding Florida Springs water quality goals. If N loading increases by just 1% each year over the 20 year life of the BMAPs and 2021-2022 proposed reductions are maintained, OFS will be more polluted at the end of the BMAP process than they are today. This finding flies in the face of the 2016 Florida Springs and Aquifer Protection Act which requires that all OFS achieve water quality goals within 20 years.

To achieve OFS water quality goals requires aggressive action by the Florida Legislature to pass new laws which significantly reduce existing nitrogen loading and prevent new sources of pollution:

- Require the creation of agricultural remediation plans for OFS and the development, adoption, and verification of advanced agricultural best management practices that are capable of achieving springs water quality goals when fully implemented. In the absence of effective best management practices, agricultural producers should lose their presumption of compliance with water quality laws.
- Implement the recommendations of the Blue Green Algae Task Force, including mandatory septic tanks inspections, ongoing analysis of the effectiveness of previously funded springs restoration projects, and accounting for future loading projections in water quality restoration plans.
- Stop preempting local rules and ordinances to improve water quality and reverse previously passed state preemptions.
- Direct the Department of Agriculture and Consumer Services to develop and adopt a more stringent and protective model fertilizer ordinance.

WE MUST SIGNIFICANTLY INCREASE APPROPRIATIONS FOR SPRINGS RESTORATION PROJECTS

The springs restoration projects submitted by the water management districts for 2021-2022 funding are projected to remove one pound of nitrogen per year for every \$2,757 spent. In contrast, a 14 lbs bag of lawn fertilizer containing nearly 4.5 lbs of nitrogen costs only \$20 to purchase at any retail home and garden store. It is 620 times more expensive to remove one lbs. of nitrogen than it is to purchase it in the first place.

Based on the cost-effectiveness of the 2021-2022 proposed projects and assuming no new sources of nitrogen pollution, it will cost nearly \$29 billion to achieve water quality goals in Florida's 24 impaired Outstanding Florida Springs. That figure is \$6 billion more than the latest estimates to complete the Comprehensive Everglades Restoration Plan (CERP). Yet, state funding for Everglades restoration projects, which also receive considerable federal funding, has been approximately 900% greater than funding for springs projects in recent years.

To achieve water quality by the 20 year deadline established in OFS BMAPs, without significant regulatory changes, would cost approximately \$1.5 billion per year. If all of the proposed springs water quality projects were funded this year it would total only \$134 million, including local and water management district matching funds -- less than 10 percent of what's needed.

The state budget created and passed by the Florida Legislature each year, and signed into law by Florida's Governor reflects the values of our elected leaders. Clearly, our current elected leaders do not value the health of Florida's springs or the communities that rely upon them.

WE NEED TO FUND BETTER PROJECTS THAT TARGET THE MAJOR SOURCES OF POLLUTION

The projects proposed by Florida's water management districts for the limited funding that is available for springs restoration projects are ineffective and ignore the largest sources of nutrient pollution.

Based on the BMAPs adopted by DEP, approximately 70% of all addressable nutrient pollution to Outstanding Florida Springs comes from agricultural pollution. However, using the most generous estimate possible, only 4% of springs restoration funding is targeted towards reducing or preventing agricultural pollution. Instead, more than 90% of springs restoration funding is being proposed for wastewater treatment facility upgrades and septic tank remediation, which are responsible for less than 18% of all addressable nitrogen loading to Outstanding Florida Springs. Many of Florida's most iconic springs, like Silver, Rainbow, and the springs of the Suwannee and Santa Fe Rivers, would still be significantly polluted even if every non-agricultural source of pollution were removed tomorrow.

Many of the projects proposed by Florida's water management districts raise serious concerns about their ability to effectively manage springs restoration funding. Several districts are brazenly ignoring DEP guidance which requires "each project submitted must have at least one project benefit" and the "spreadsheet must be written in clear, concise, and publicly-understood language." These may seem like low bars to clear, yet the Districts managed to come up short.

Of the 27 water quality projects (excluding land conservation projects) proposed for funding, eight are projected to remove a combined total of 227 lbs/year of nitrogen when completed, an average of less than 30 lbs per project. Five of the proposed projects, including three proposed by the St. Johns River Water Management District, are reported to have no benefit to water quality or water quantity.

Currently, only water management districts can propose projects to DEP for state springs funding. The projects being proposed are neither cost-effective nor properly targeted to achieve springs restoration goals. DEP should revise its rules to allow projects to be submitted directly by DACS, accredited land trusts, and other entities with an interest in protecting springs.

FIVE QUESTIONABLE AND INEFFECTIVE SPRINGS PROJECT PROPOSALS

Under Governors Scott and DeSantis the technical and financial capabilities of Florida's water management districts have been significantly depleted. Districts have lost many of their senior scientists and engineers, and with them centuries of institutional knowledge and expertise. Ad valorem tax rates are down approximately 50% from 2010 levels, leaving the Districts underfunded, understaffed, and increasingly reliant on appropriations from the Florida Legislature. Decisions are no longer driven by the science and policy experts at the water management districts, but by politicians and political appointees.

The deterioration of Florida's water management districts is illustrated by the quality and effectiveness of many of the projects proposed for springs restoration funding. Following are a few of the questionable and ineffective projects proposed by water management districts this year.

1. Upgraded sludge treatment for the Springs RV Resort, Total cost \$390,365

The St. Johns River Water Management District proposed upgrading a sewage sludge treatment plant for the Springs RV Resort at a cost of \$390,365. The project is estimated to remove 119 pounds of nitrogen per year from the Silver Springs Basin (.01% of the necessary reduction to achieve the TMDL) at a cost ratio of one pound per \$3,333 of project funding. The Springs RV Resort is located approximately one mile from Silver Springs. It is owned by the for-profit Wilder RV Parks corporation which operates 18 RV parks across Florida and Texas. Limited springs funding should be targeted towards the largest sources of pollution, agriculture and residential septic tanks, not corporate welfare projects that subsidize unsustainable development.

2. Construction of a new water storage tank, Total cost \$1,784,279

The Suwannee River Water Management District proposed to construct a new water storage tank for the City of Newberry at a cost of \$1,784,279. The project has no water quality or water quantity benefit to the Santa Fe Basin. Although labeled as a "water conservation" project, it serves no apparent water conservation purpose. The project description submitted by the District states that it is intended to "increase capacity" which will result in more, not less, pumping from the Santa Fe Basin. This project is not eligible for springs restoration funding and never should have been proposed.

3. Flood control projects for privately owned land, total cost \$742,112

The St. Johns River Water Management District proposed two flood control projects to reduce flooding to approximately 27 acres of privately owned land at a cost of \$742,112. One of the projects is located more than seven miles from Silver Springs. The projects have no benefit to springs water quality or quantity, in violation of DEP guidance on minimal standards for springs restoration projects. These projects are not eligible for springs restoration funding and never should have been proposed. To achieve water quality goals, we must reduce nitrogen by 72% (930,135 lbs/year) in the Silver Springs Basin. Additionally, Silver Springs is suffering from declining flows and has an adopted Minimum Flow and Level Prevention plan. The SJRWMD owes the public an explanation as to why they are unable or unwilling to propose beneficial springs restoration projects.

4. Removal of sediment from Little Wekiva River, total cost \$1,750,000

The St Johns River Water Management District proposed a project to remove sediment from the Little Wekiva River at a cost of \$1,750,000. The project has no water quality or water quantity benefit to Wekiwa Spring. It is widely believed that the sediment accumulating in the Little Wekiva River is due to runoff from I-4 construction. The Department of Transportation's budget for the 2021-2022 fiscal year is \$10.3 billion, compared to only \$75 million provided for springs restoration projects. Removing sediment from the Little Wekiva River is urgently needed, but should be funded by the Florida Department of Transportation or the responsible entity, not from limited springs restoration dollars.

5. Extend central sewer in the Town of Malone, total cost \$4,062,265

The Northwest Florida Water Management District proposed extending central sewer infrastructure to abandon 170 septic tanks in the Town of Malone at a cost of \$4,062,265. The project is estimated to remove 1421 pounds of nitrogen per year from the Jackson Blue Basin (.2% of the necessary reduction to achieve the TMDL) at a cost ratio of one pound per \$2,857 of project funding. Nearly 97% of the addressable nutrient loading to Jackson Blue is a result of agricultural pollution, yet none of the proposed 2021-2022 projects reduce agricultural pollution. Septic tanks are responsible for only 3% of the addressable loading, yet are receiving more than 99% of the basin's 2021-2022 funding. Springs restoration funding should be targeted to addressing the major sources of nitrogen pollution in each basin.

THE DATA USED FOR THIS REPORT

All of the data utilized in creating this report come directly from the Outstanding Florida Springs (OFS) Basin Management Action Plans (BMAPs) created by the Florida Department of Environmental Protection (DEP) and from the 2021-2022 springs restoration funding project proposals submitted by water management districts.

This report only analyzes the water quality projects submitted by the Southwest, St. Johns River, Suwannee River, and Northwest Florida Water Management Districts. The Districts also submitted \$3,698,507 in water supply/conservation projects. These projects are projected to make 2.3 mgd of additional water available at an average cost of .63 gallons per dollar. Additionally, one sediment removal project was proposed for the Little Wekiva River at a cost of \$1,750,000.

The nitrogen reduction benefits for water quality projects submitted by the water management districts are calculated in pounds per year of loading to groundwater at the project site. In contrast, the Total Maximum Daily Load water quality goals in Outstanding Florida Springs Basin Management Action Plans are determined by nitrogen loading at the spring vent. Although not a one to one comparison, it is illogical to believe that a project could have a greater benefit to water quality at the spring vent than the loading reduction to groundwater at the project site. For this reason, these projections may overestimate the actual nitrogen reduction at the spring vent from a given project or suite of projects.

Nitrogen loading figures for springs basin exclude atmospheric deposition. There are currently no projects designed to remove atmospheric deposition sources of nitrogen which may be local, national, or international in origin.

STATEWIDE OVERVIEW

2021-2022 Water Quality Funding \$133,759,476

8

BASED ON 2021-2022 PROPOSED PROJECTS:

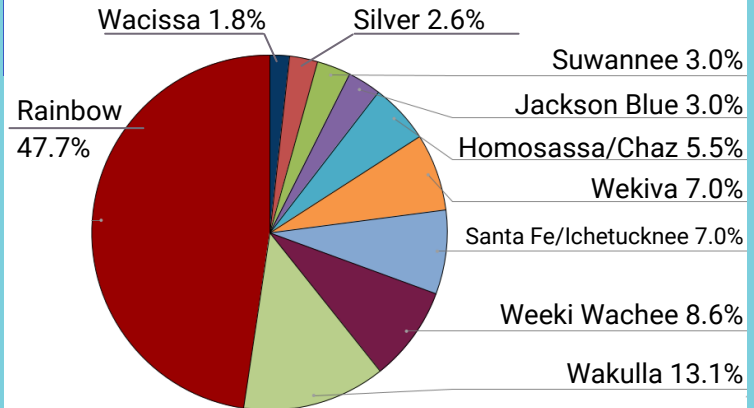
The cost to remove **ONE POUND** of nitrogen per year is **\$2,757**

To remove enough nitrogen to reach Water Quality Goals* it will take **217 YEARS**

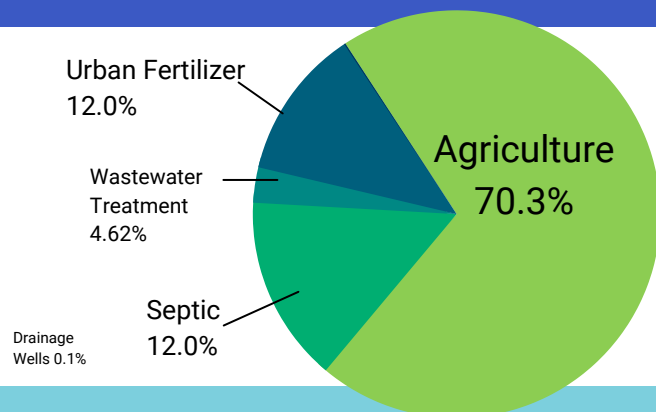
The total cost to reach Water Quality Goals* for all Outstanding Florida Springs would be over \$29 Billion: **\$29,111,810,086**

*Assuming no new sources of pollution

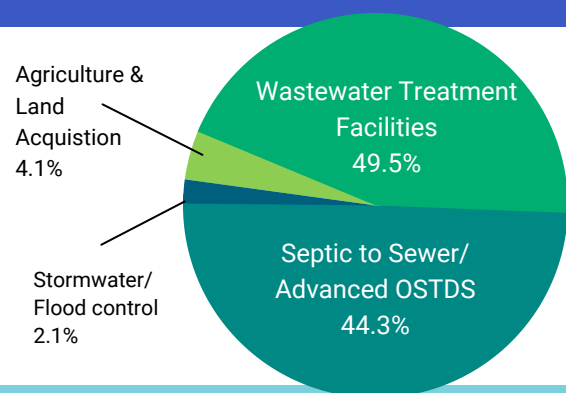
WATER QUALITY FUNDING BY SPRINGS BASIN



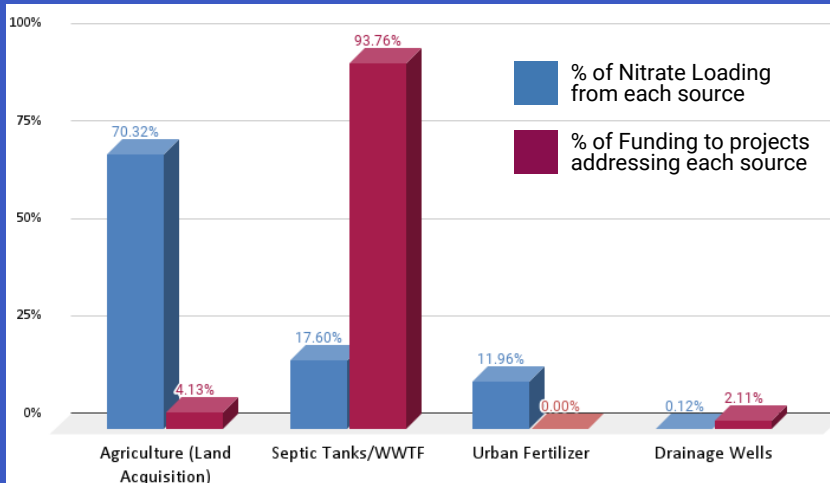
SOURCES OF ADDRESSABLE NITRATE POLLUTION STATEWIDE



PROPOSED FUNDING BY PROJECT TYPE



COMPARING POLLUTION SOURCES TO 2021-2022 FUNDING BY PROJECT TYPE



TOTAL NITROGEN REDUCTION NEEDED FOR ALL OUTSTANDING FLORIDA SPRINGS BMAPS

10,557,643 POUNDS



BASED ON 2021-2022 PROPOSED PROJECTS:

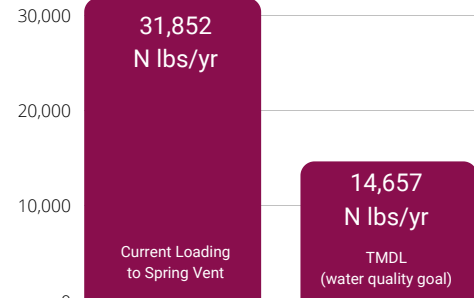
The cost to remove **ONE POUND** of nitrogen per year is **\$3,333**

To remove enough nitrogen to reach Water Quality Goals* it will take **344 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$50 Million: **\$57,328,130**

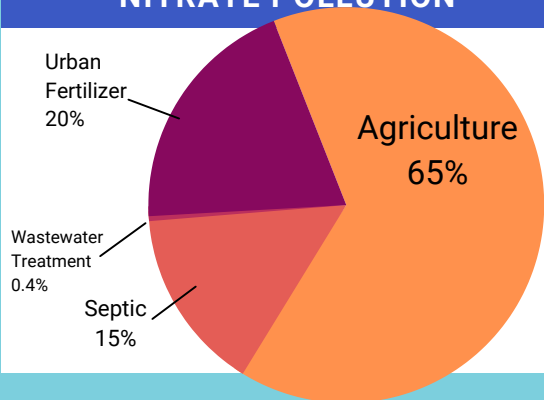
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **17,195 POUNDS**

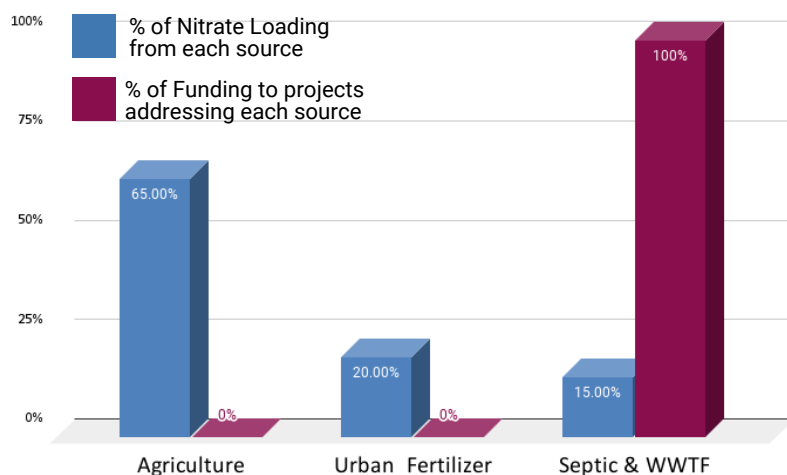
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$0	\$0	\$0	\$166,700
(0%)	(0%)	(0%)	(100%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

17,195 POUNDS



50 POUNDS is what would be removed by these proposed projects, **0.29%** of what is necessary.

HOMOSASSA/ CHASSAHOWITZKA

- Southwest Florida Water Management District
- 2021-2022 funding: \$7,348,000
- Percentage of total funds: 5.5%

10

BASED ON 2021-2022 PROPOSED PROJECTS:

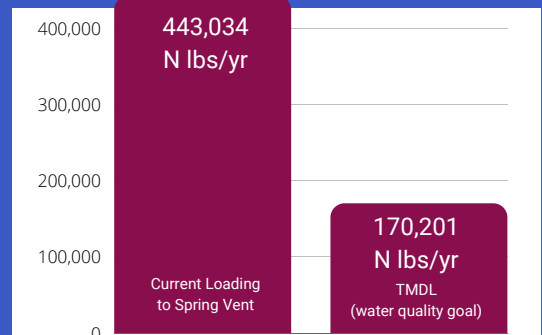
The cost to remove **ONE POUND** of nitrogen per year is **\$3,846**

To remove enough nitrogen to reach Water Quality Goals* it will take **144 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$1 Billion: **\$1,056,814,383**

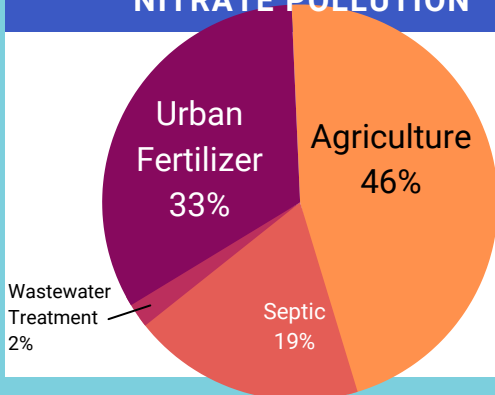
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **272,833 POUNDS**

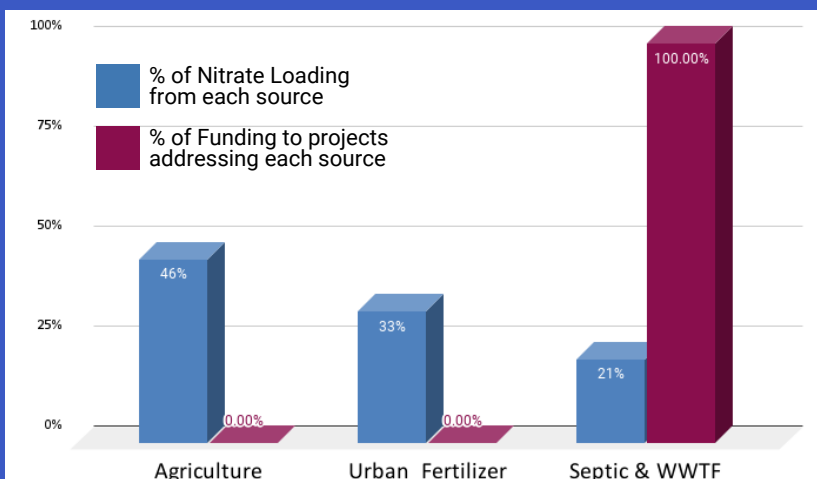
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$7,348,000	\$0	\$0	\$0
(100%)	(0%)	(0%)	(0%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

272,833 POUNDS



1897 POUNDS is what would be removed by these proposed projects, **0.7%** of what is necessary.

JACKSON BLUE

- Northwest Florida Water Management District
- 2021-2022 funding: \$4,072,265
- Percentage of total funds: 3.0%

11

BASED ON 2021-2022 PROPOSED PROJECTS:

The cost to remove **ONE POUND** of nitrogen per year is **\$2,862**

To remove enough nitrogen to reach Water Quality Goals* it will take **458 YEARS**

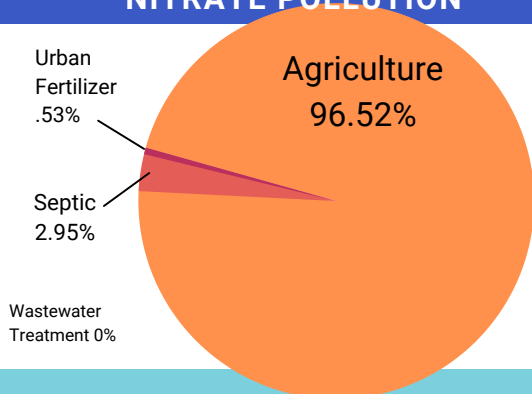
The total cost to reach Water Quality Goals* for this basin would be over \$1 Billion
\$1,865,807,083

*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



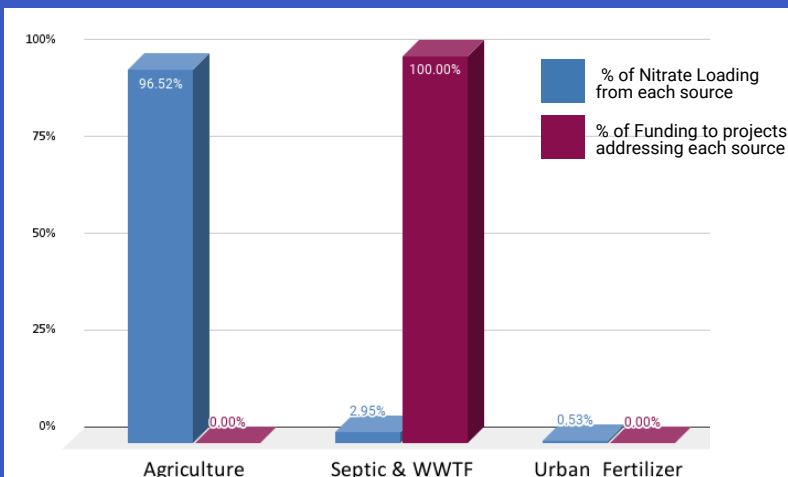
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$4,062,265	\$0	\$0	\$10,000
(99.75%)	(0%)	(0%)	(0.25%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

651,982 POUNDS



1,423 POUNDS is what would be removed by these proposed projects, **0.22%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

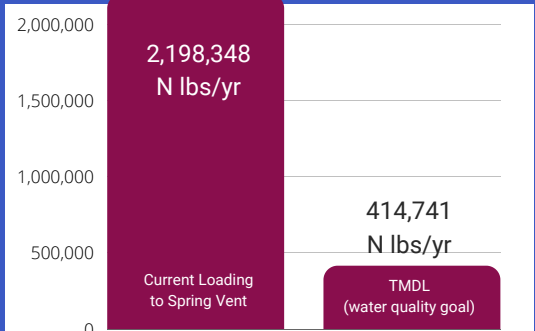
The cost to remove **ONE POUND** of nitrogen per year is **\$3,030**

To remove enough nitrogen to reach Water Quality Goals* it will take **84 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$5 Billion: **\$5,341,393,100**

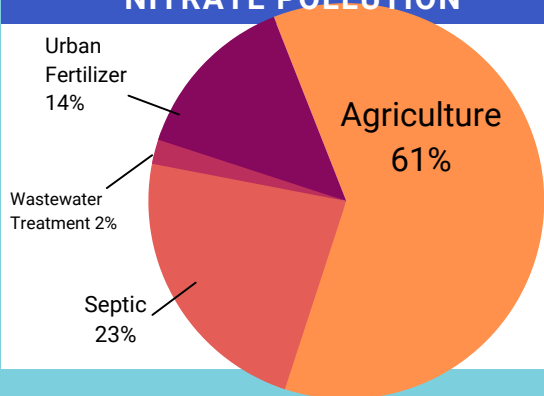
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **1,783,607 POUNDS**

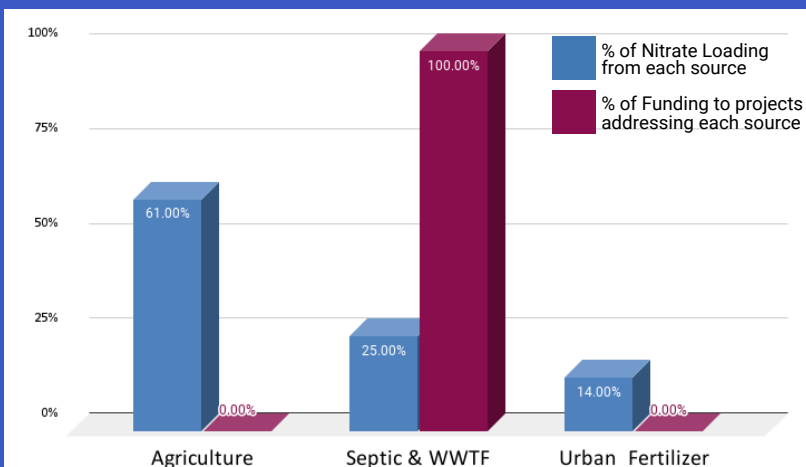
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$11,515,538	\$0	\$0	\$52,200,000
(18.07%)	(0%)	(0%)	(81.93%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

1,783,607 POUNDS



21276 POUNDS is what would be removed by these proposed projects, **1.19%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

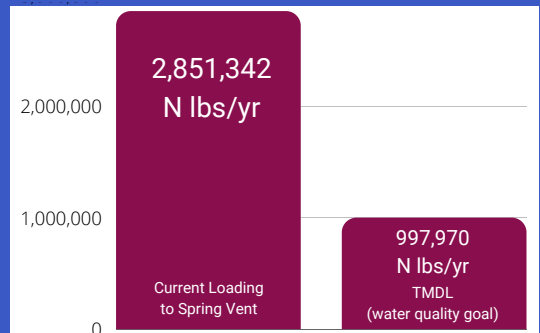
The cost to remove **ONE POUND** of nitrogen per year is **\$2,174**

To remove enough nitrogen to reach Water Quality Goals* it will take **391 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$4 Billion: **\$4,006,363,354**

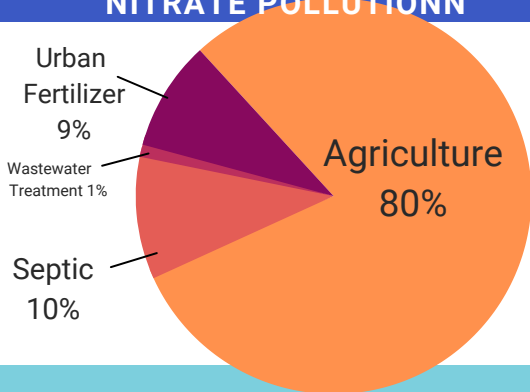
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **1,853,372 POUNDS**

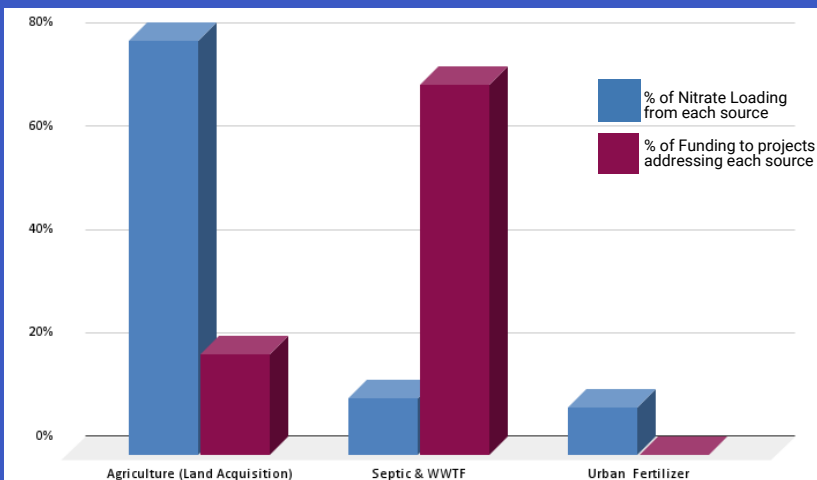
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

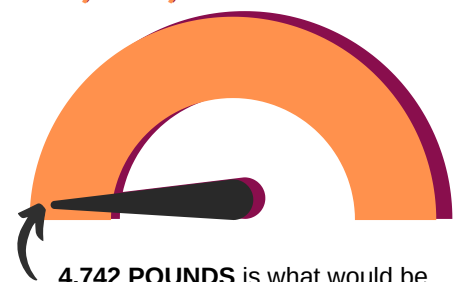
Septic	Agriculture (land acquisition)	Urban Fertilizers	Wastewater Treatment
\$589,000	\$2,000,000	\$0	\$7,661,600
(5.75%)	(19.51%)	(0%)	(74.74%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

1,853,372 POUNDS



4,742 POUNDS is what would be removed by these proposed projects, **.26%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

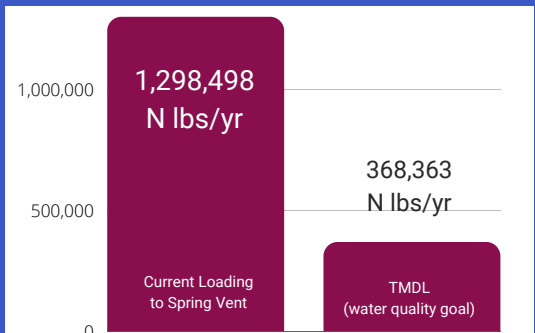
The cost to remove **ONE POUND** of nitrogen per year is **\$8,333**

To remove enough nitrogen to reach Water Quality Goals* it will take **2,215 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$7 Billion: **\$7,720,058,491**

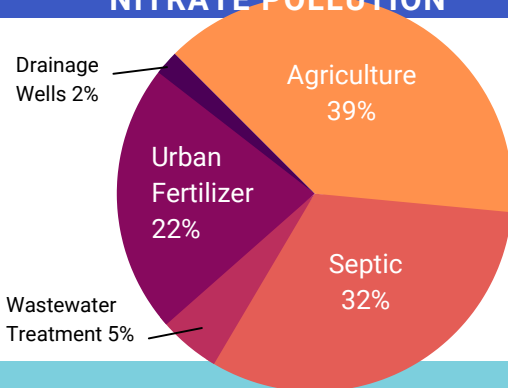
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **930,135 POUNDS**

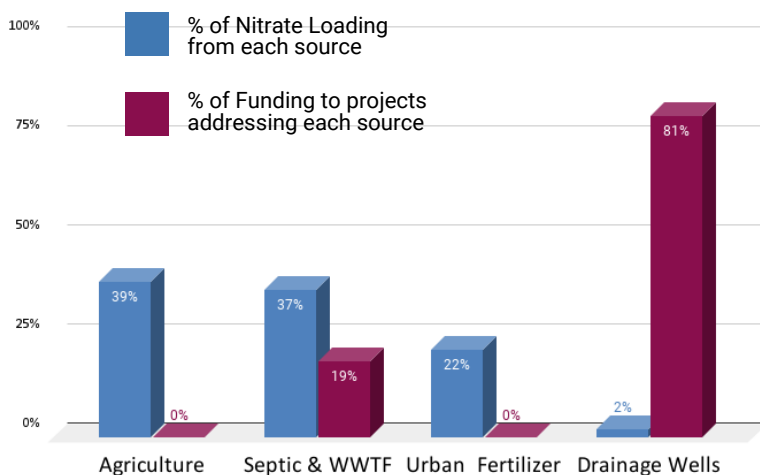
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment	Drainage Wells
\$280,000	\$0	\$0	\$390,365	\$2,815,607
(8.0%)	(0%)	(0%)	(11%)	(81%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

930,135 POUNDS



BASED ON 2021-2022 PROPOSED PROJECTS:

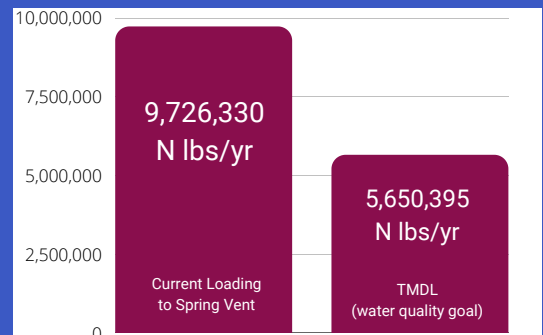
The cost to remove **ONE POUND** of nitrogen per year is **\$1,333**

To remove enough nitrogen to reach Water Quality Goals* it will take **1,354 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$5 Billion: **\$5,463,919,510**

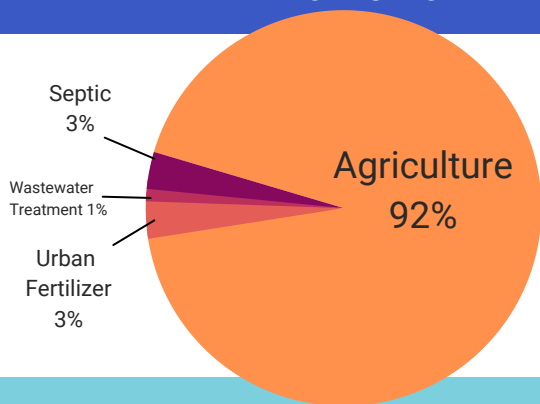
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **4,075,935 POUNDS**

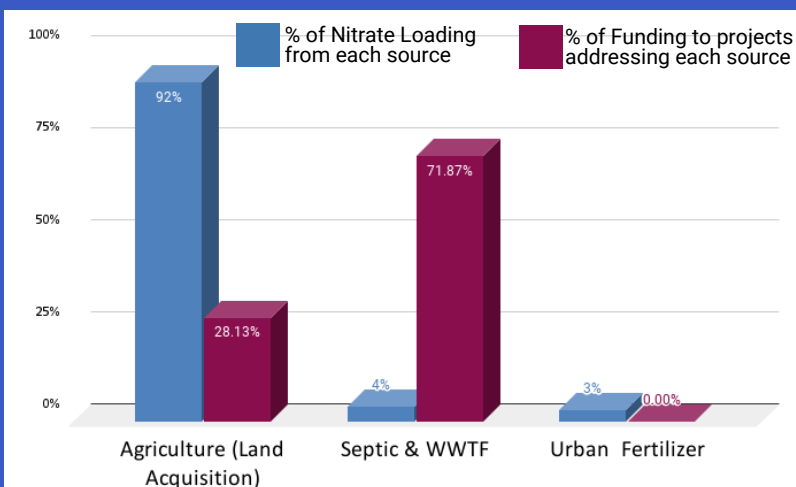
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture (land acquisition)	Urban Fertilizers	Wastewater Treatment
\$0	\$1,135,000	\$0	\$2,900,000
(0%)	(28%)	(0%)	(72%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

4,075,935 POUNDS



3,010 POUNDS is what would be removed by these proposed projects, **.07%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

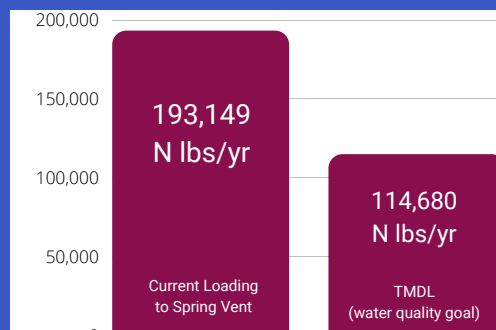
The cost to remove **ONE POUND** of nitrogen per year is **\$1,724**

To remove enough nitrogen to reach Water Quality Goals* it will take **57 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$100 Million: **\$135,873,344**

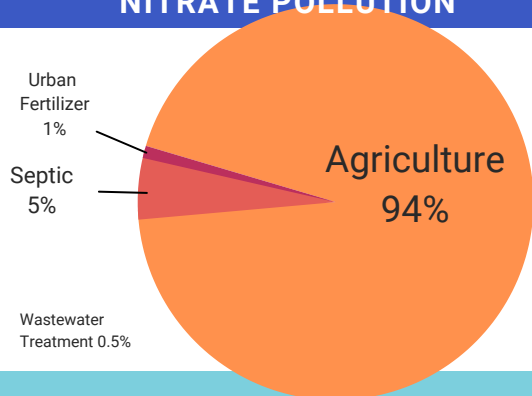
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **78,469 POUNDS**

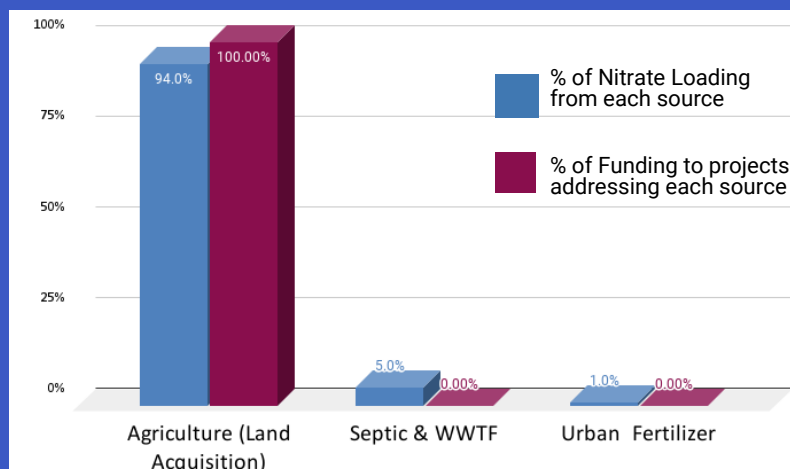
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

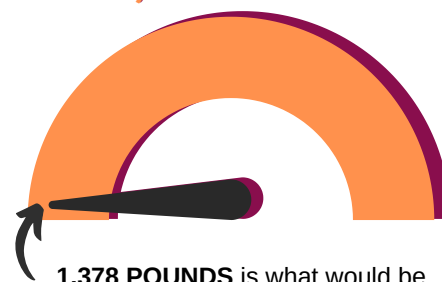
Septic	Agriculture (land acquisition)	Urban Fertilizers	Wastewater Treatment
\$0	\$2,386,082	\$0	\$0
(0%)	(100%)	(0%)	(0%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

78,469 POUNDS



1,378 POUNDS is what would be removed by these proposed projects, **1.76%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

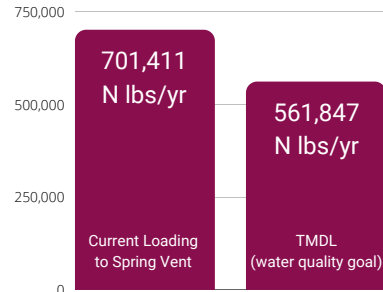
The cost to remove **ONE POUND** of nitrogen per year is **\$3,226**

To remove enough nitrogen to reach Water Quality Goals* it will take **25 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over **\$400 Million:**
\$447,929,733

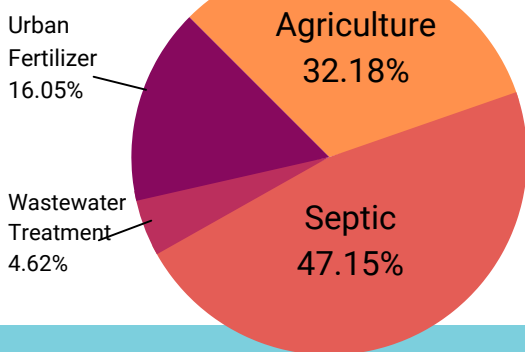
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals :
139,564 POUNDS

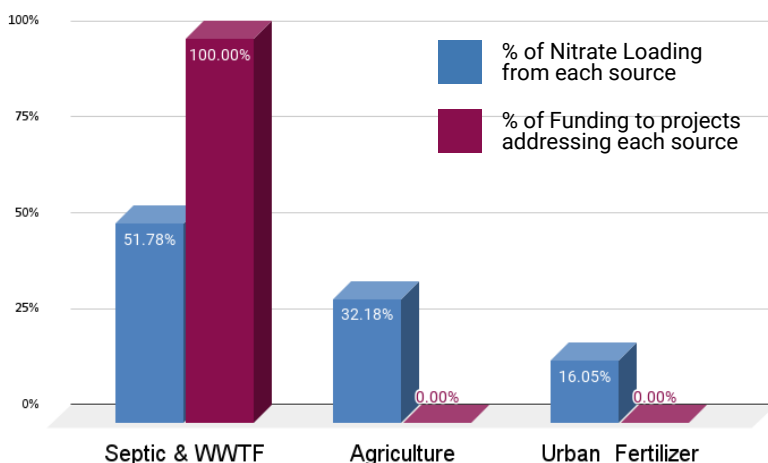
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$14,801,968	\$0	\$0	\$2,632,000
(84.9%)	(0%)	(0%)	(15.1%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

139,564 POUNDS



5,432 POUNDS is what would be removed by these proposed projects, **3.89%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

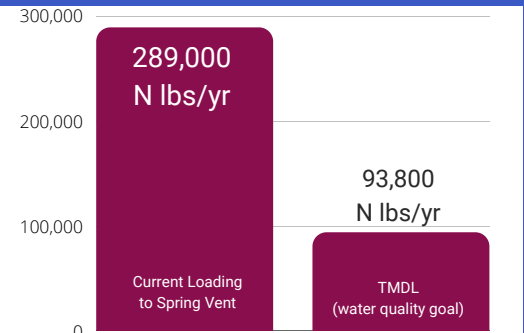
The cost to remove **ONE POUND** of nitrogen per year is **\$5,000**

To remove enough nitrogen to reach Water Quality Goals* it will take **85 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$900 Million: **\$978,117,137**

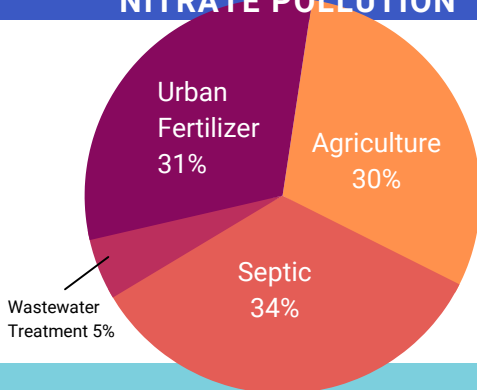
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **195,200 POUNDS**

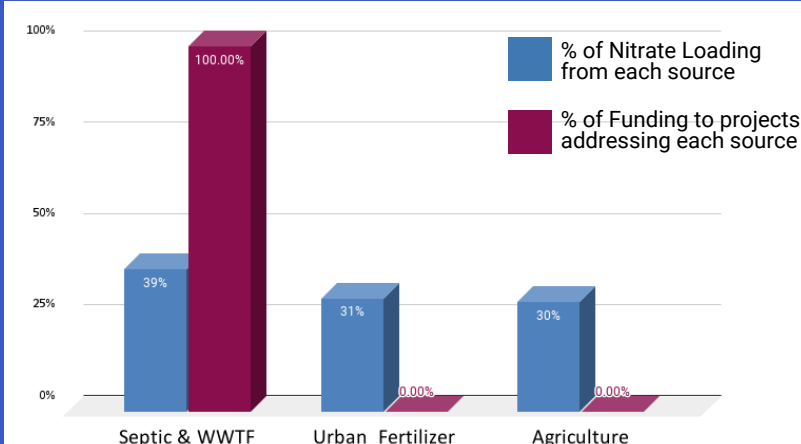
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$11,550,000	\$0	\$0	\$0
(100.00%)	(0%)	(0%)	(0%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

195,200 POUNDS



2,305 POUNDS is what would be removed by these proposed projects, **1.18%** of what is necessary.

BASED ON 2021-2022 PROPOSED PROJECTS:

The cost to remove **ONE POUND** of nitrogen per year is **\$5,882**

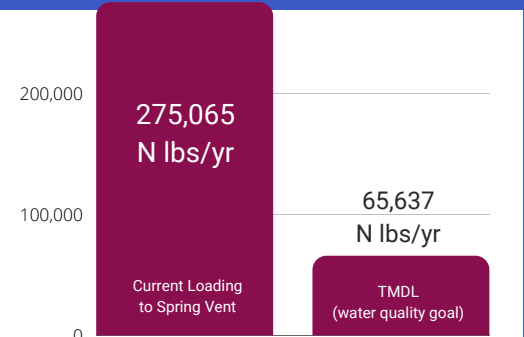
To remove enough nitrogen to reach Water Quality Goals* it will take **130 YEARS**

The total cost to reach Water Quality Goals* for this basin would be over \$1 Billion:

\$1,209,232,637

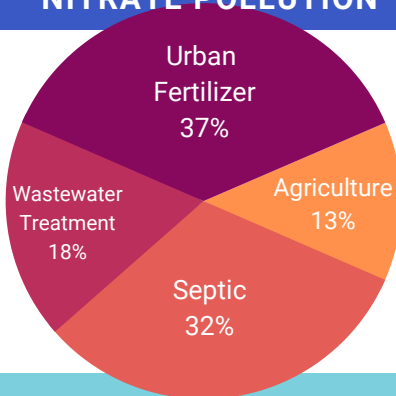
*Assuming no new sources of pollution

CURRENT NITROGEN LOAD VS GOAL



The total nitrate that needs to be removed to meet water quality goals : **209,428 POUNDS**

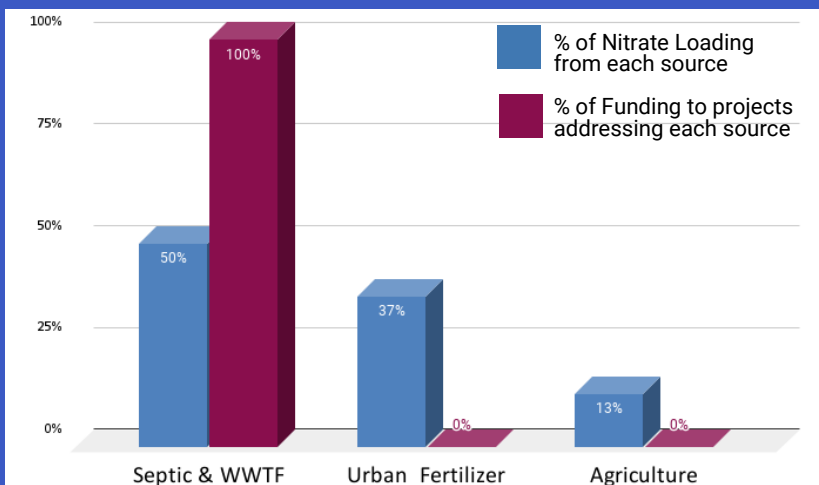
SOURCES OF ADDRESSABLE NITRATE POLLUTION



PROPOSED FUNDING BY POLLUTION SOURCE

Septic	Agriculture	Urban Fertilizers	Wastewater Treatment
\$9,315,351	\$0	\$0	\$0
(100%)	(0%)	(0%)	(0%)

COMPARING POLLUTION SOURCES TO FUNDING



THE TOTAL NITRATE THAT NEEDS TO BE REMOVED TO MEET WATER QUALITY GOALS FOR THIS BASIN:

209,428 POUNDS



1,601 POUNDS is what would be removed by these proposed projects, **.76%** of what is necessary.

APPENDIX PROPOSED SPRINGS PROJECTS

The full list of projects as published by Florida Department of Environmental Protection can be found at

<https://floridadep.gov/sites/default/files/FY21-22%20Springs%20funding%20project%20submittals.pdf>