

Utilities Department

Work Session

**Septic Tank Workgroup
Policy Recommendations**

May 21, 2024



Presentation Outline

- **Background**
- **Policy Considerations**
- **Recommendations**
- **Stakeholder Engagement**
- **Next Steps and Schedule**
- **Summary**
- **Policy Direction**



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Background – Orange County's Water Resources

- Over 600 named lakes
- 12 major drainage basins (9 river systems)
- Wekiwa & Rock Springs
(Outstanding Florida Springs)
- Wekiva River
(1 of 2 Wild & Scenic Rivers in Florida)
- Econlockhatchee River (OFW)
- Headwaters of Everglades
 - Butler Chain of Lakes (OFW)
 - Hart Branch and Shingle, Boggy, Cypress, Reedy Creeks





Background – Water Quality

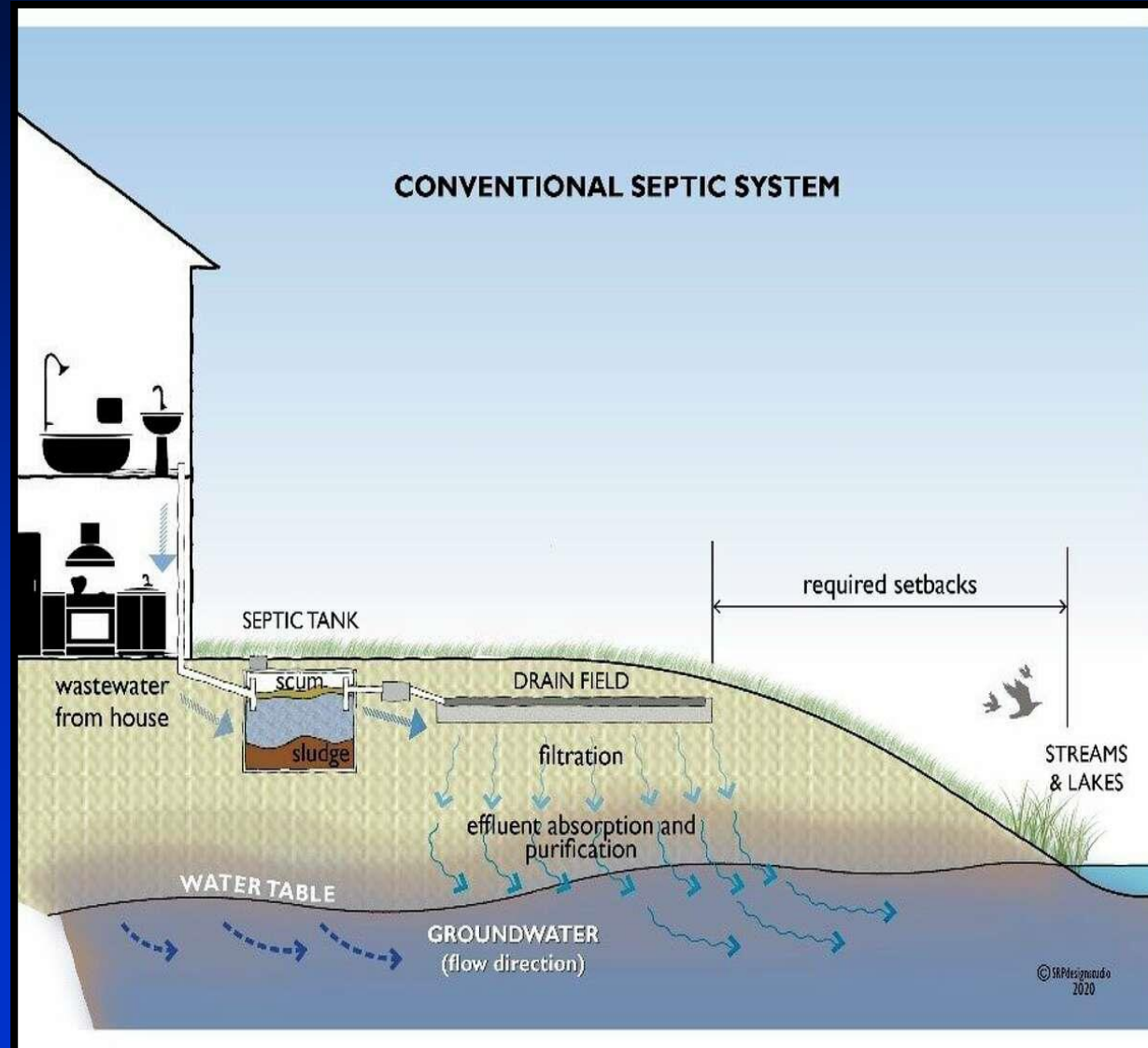
- **Natural water quality can be impaired by nutrients**
 - Phosphorous
 - Nitrogen
- **Excess nutrients cause overabundance of algae**
 - Reduce diversity of plants and animals
 - Cause fish kills





Background – Septic Systems Overview

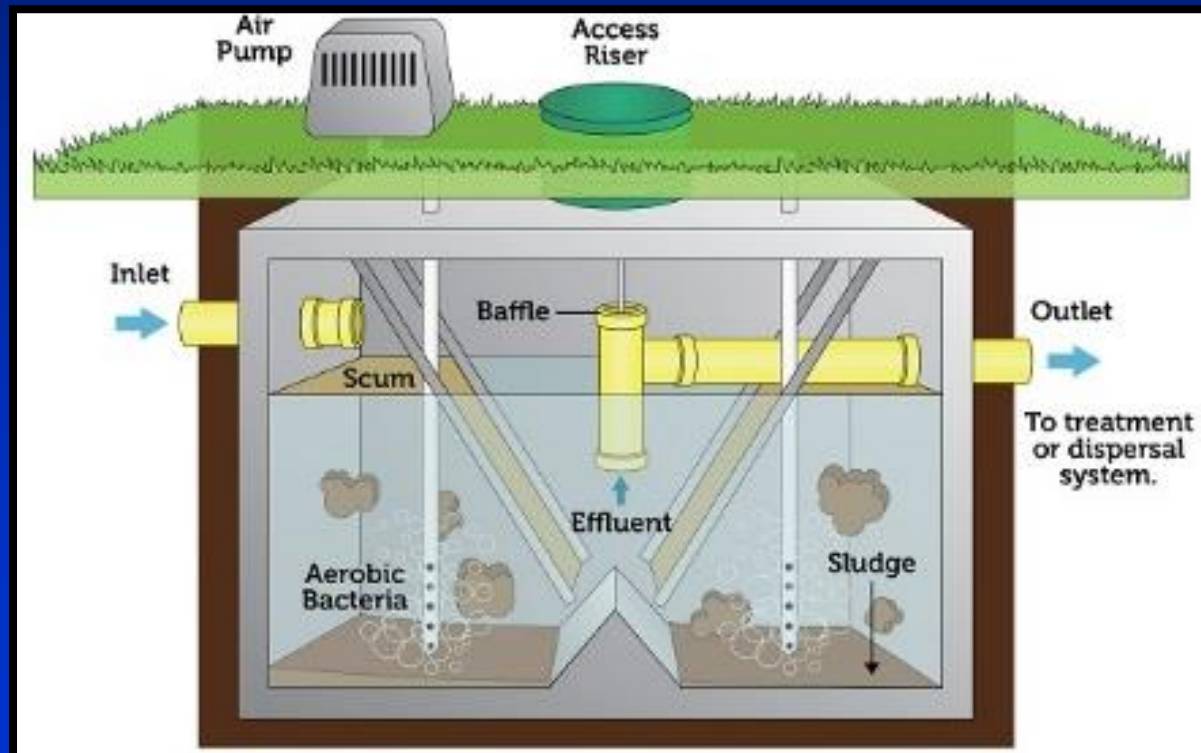
- Conventional septic systems
 - Provide effective wastewater treatment in the right locations and at the right densities





Background – Septic Systems Overview

- Enhanced (advanced) septic systems
 - Provide higher nutrient removals than conventional systems ($\geq 65\%$ nitrogen reduction)





Background – Workgroup Overview

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- **Septic Tank Workgroup Created to Protect our Water Resources**
 - Comprised of staff from multiple County departments and FDOH
 - Protect Vulnerable Areas from excessive nitrogen associated with conventional septic tanks
- **BCC Work Sessions**
 - Workgroup – February 2022
 - Subgroups – June 2022 to September 2022
 - Groundwater Vulnerability Assessment (GVA) – June 2023
- **Mayor & Commissioners Briefings – September to December 2023**
- **Stakeholder Engagement – December 2023 to February 2024**

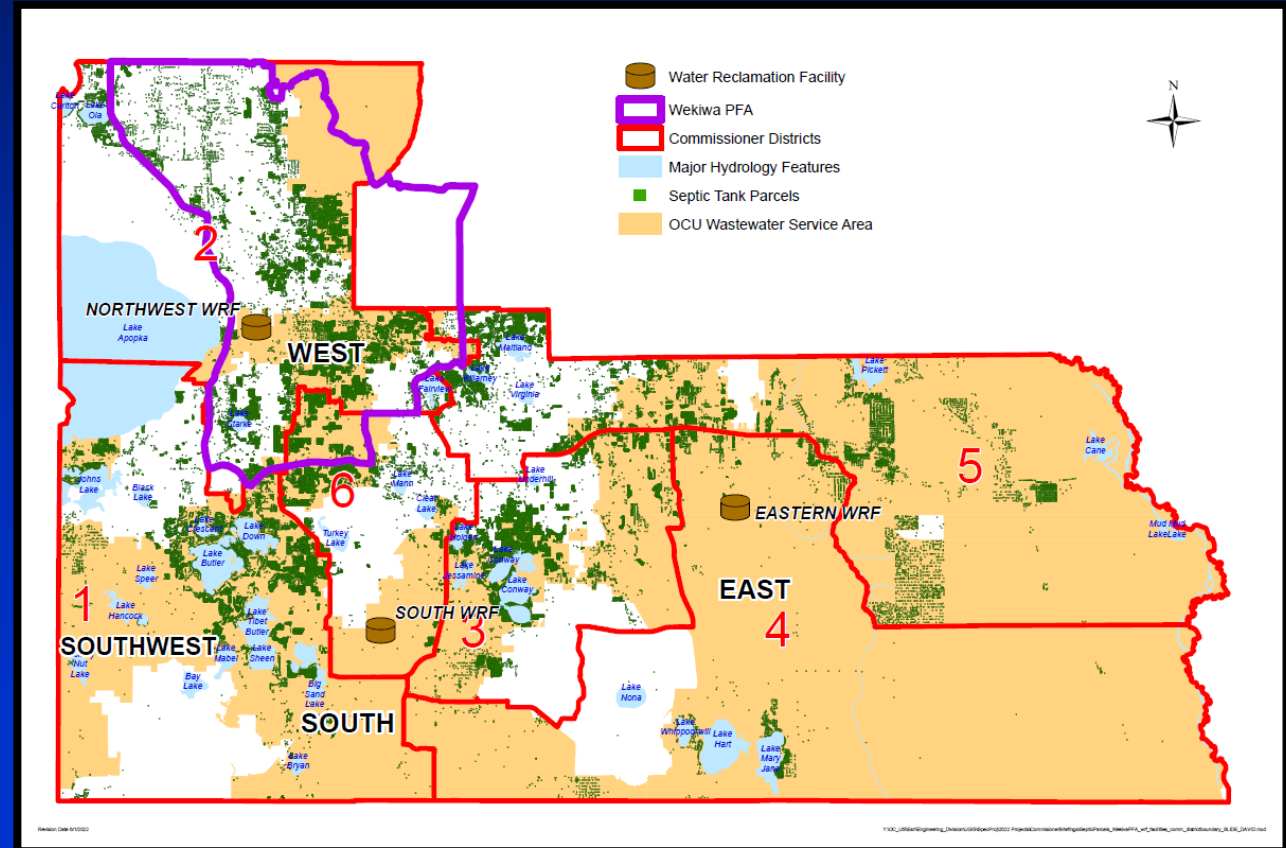
Background – Existing Requirements for Septic Systems

▪ Wekiwa and Rock Springs Basin Management Action Plan (BMAP) (2018)

– Priority Focus Area (PFA)

- NEW systems – Lots less than 1 acre require enhanced nitrogen-reducing systems (65% nitrogen removal)
 - **Effective May 2021**
- EXISTING systems – No repairs to conventional systems
 - **To be enforced in the future**

Wekiwa PFA

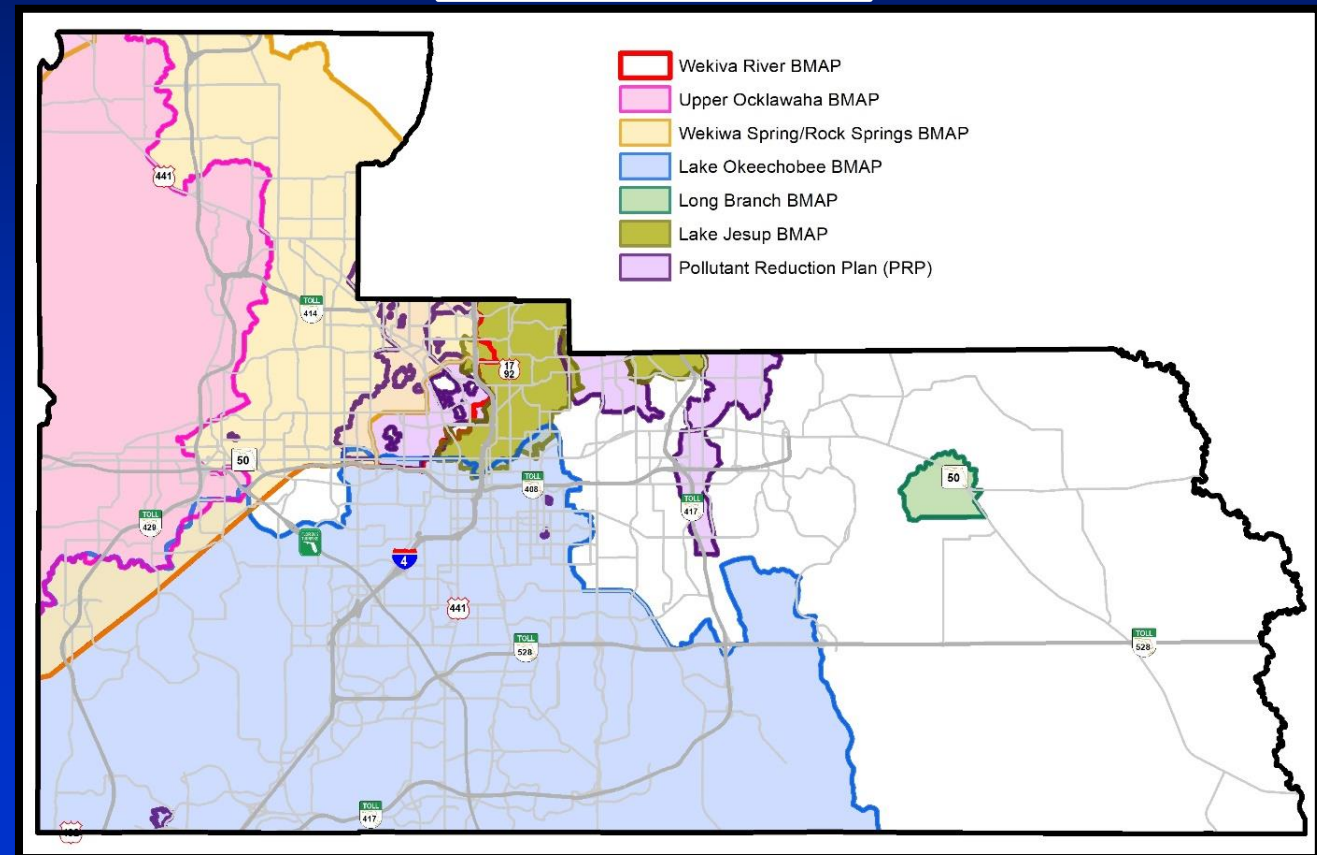


Background – Existing Requirements for Septic Systems

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- **House Bill 1379 (2023)**
 - BMAPs, Reasonable Assurance Plans (RAP), and Pollution Reduction Plans (PRP)
 - NEW systems – Lots 1 acre or less require enhanced nitrogen-reducing systems (65% nitrogen removal)
 - **Effective July 2023**
 - EXISTING systems
 - **No upgrade requirements**

BMAPs/PRP





Background – Groundwater Vulnerability Assessment

The GVA identified the County Priority Vulnerability Areas

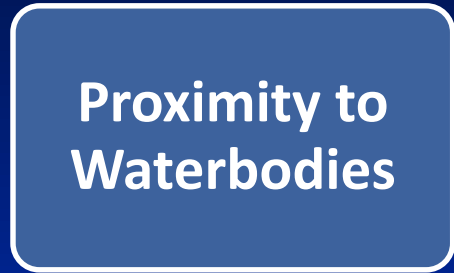
(PVA's)



Easy Flow to Groundwater



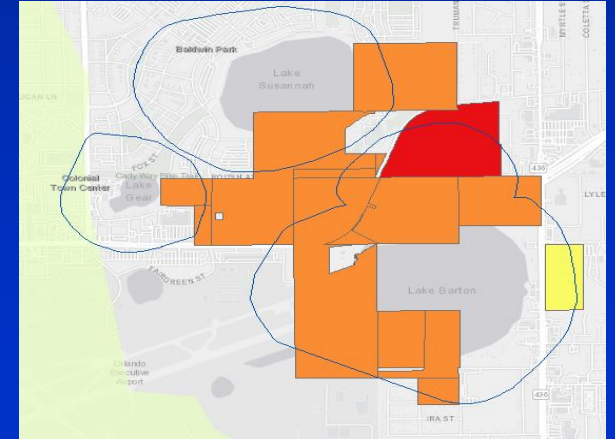
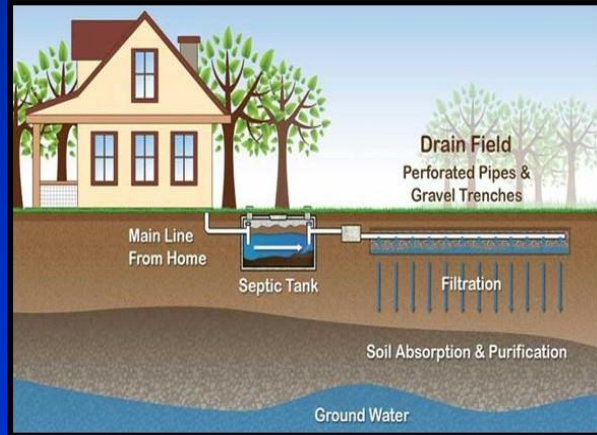
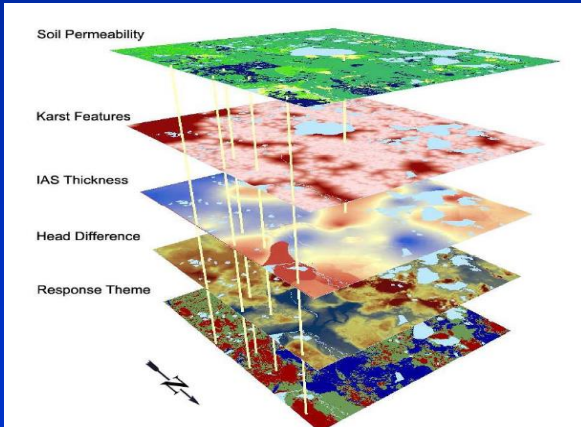
Source of Nutrients



Target of Nutrients



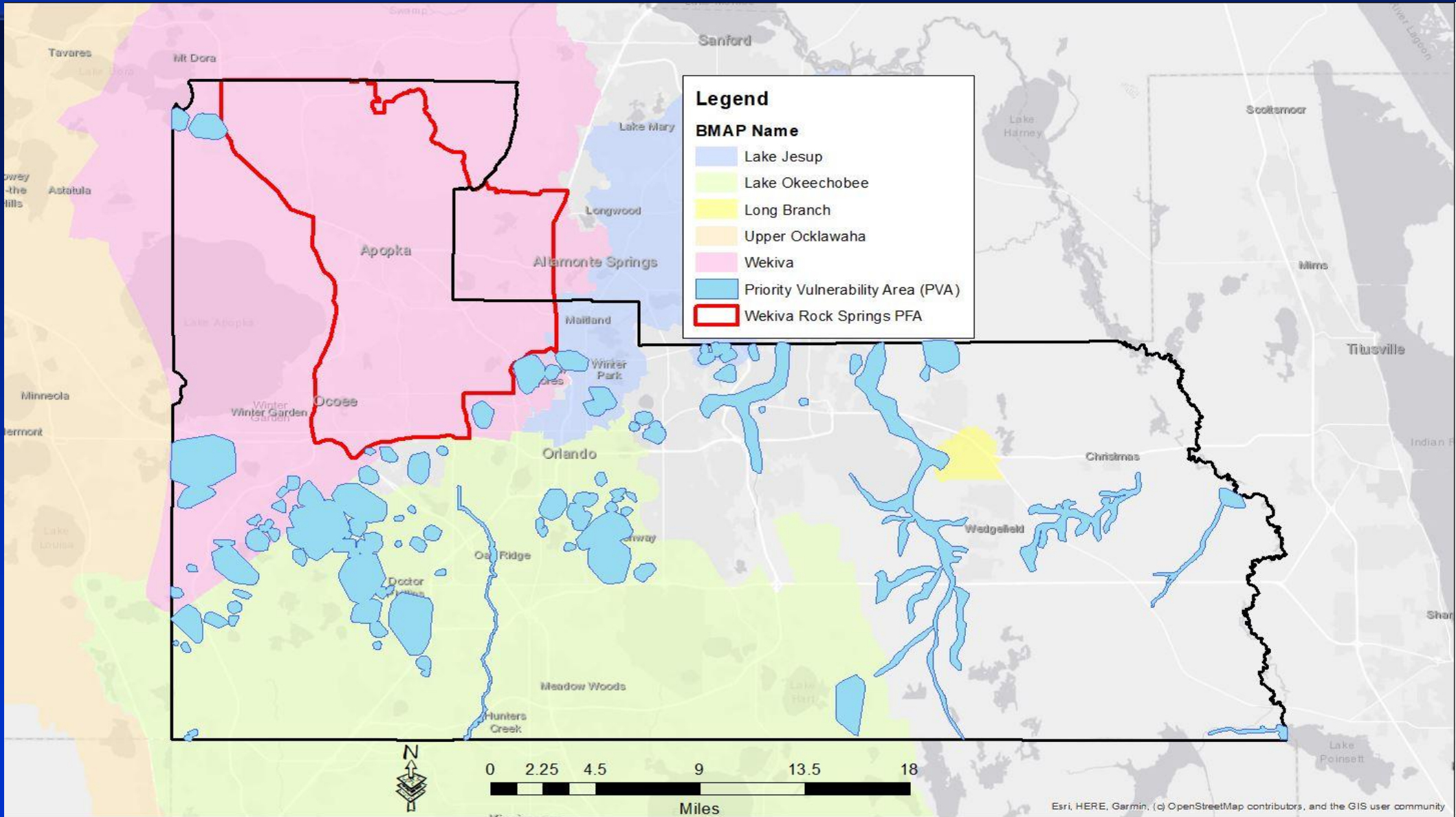
Priority Vulnerability Areas



Vulnerable Areas = Wekiwa PFA and County PVAs



Background – Priority Vulnerability Areas (PVAs)



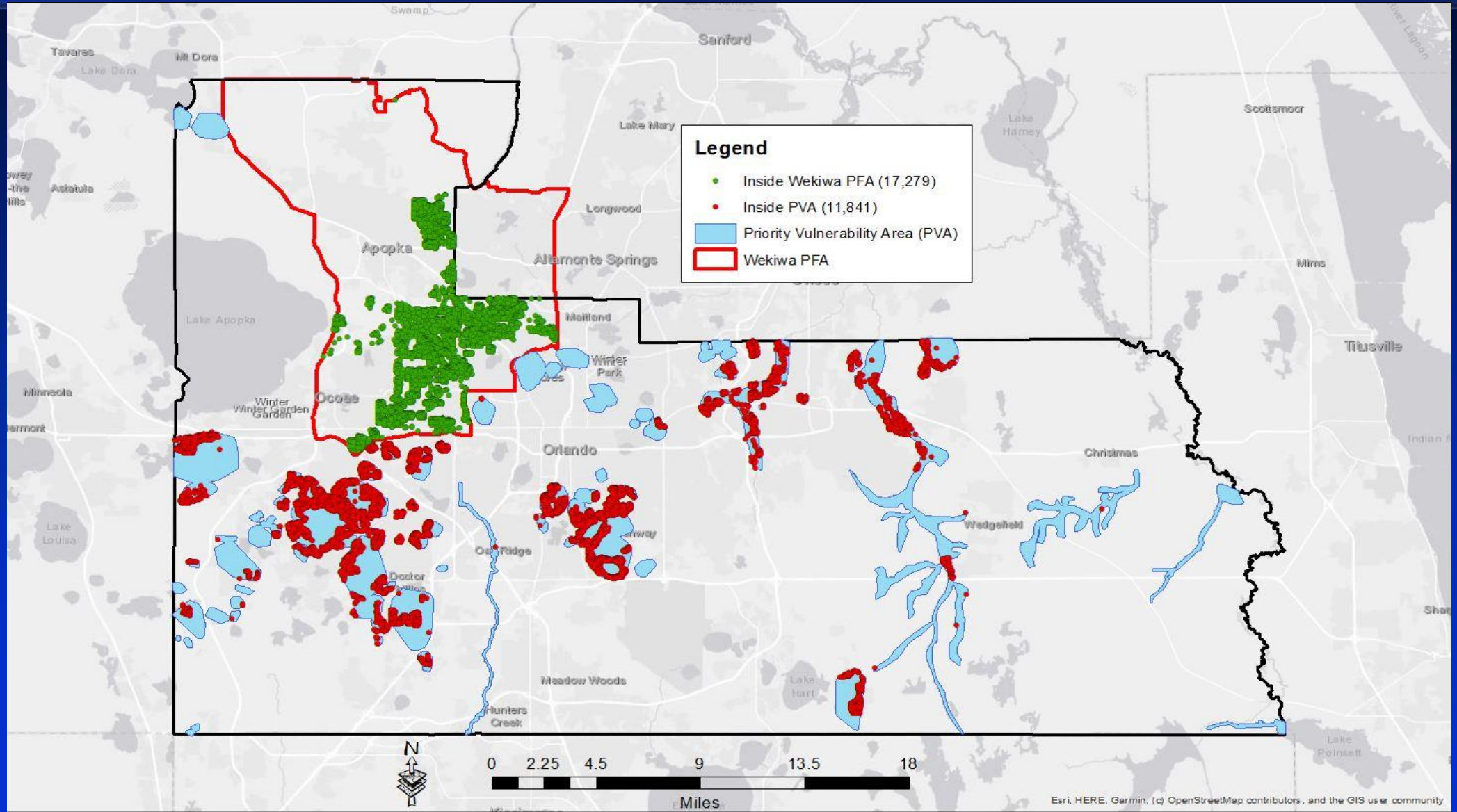


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Policy Considerations – Existing Septic Tank Parcels in Vulnerable Areas





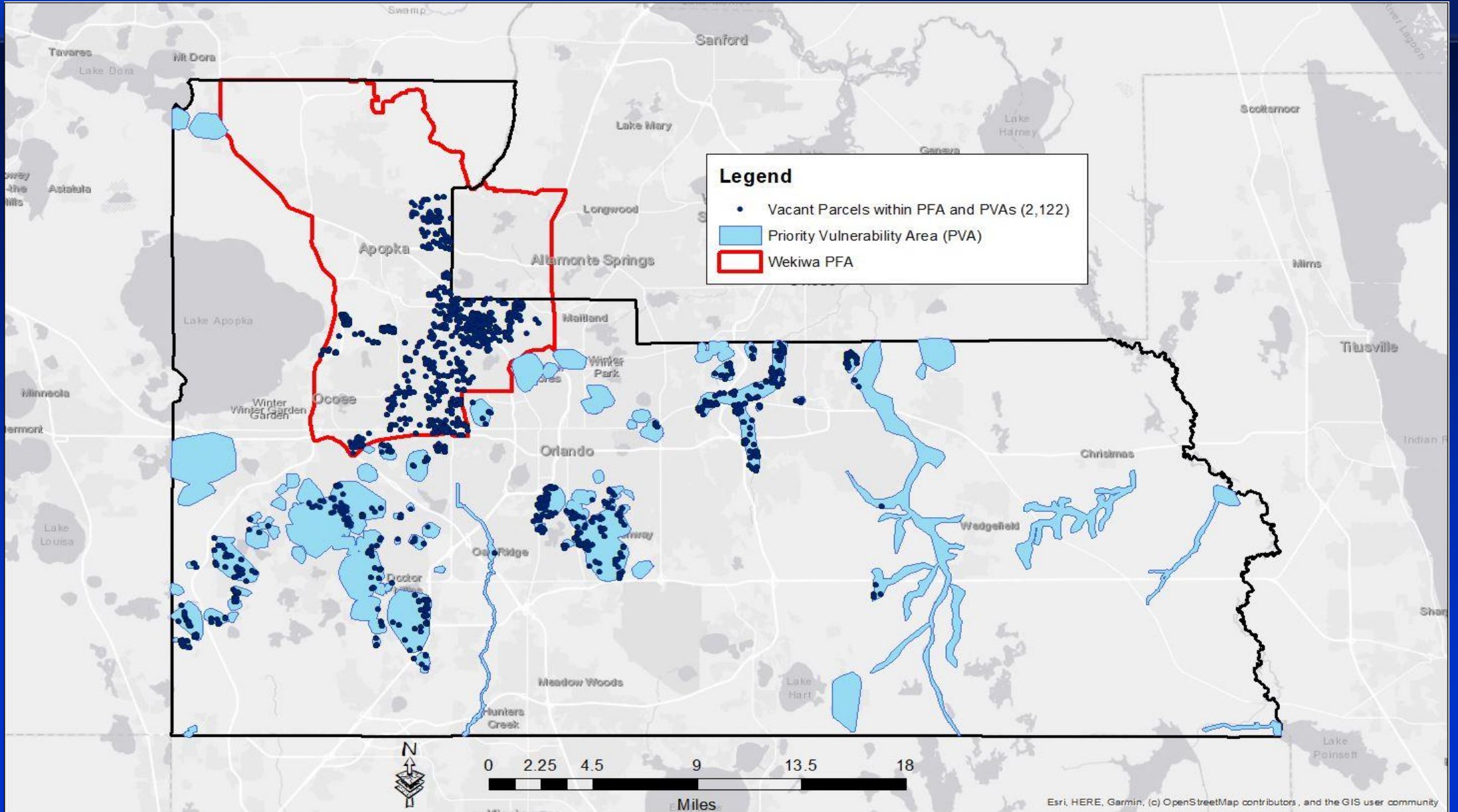
Policy Considerations – Existing Septic Systems

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- **No proposed policy changes for Existing Systems**
 - The State is leading this issue; County to follow their direction
- **In the Wekiwa PFA, the State is providing grants to partially offset costs**
 - Septic-to-Sewer projects cost approximately \$75,000 per lot
 - Existing Septic Upgrades cost approximately \$25,000 per lot
- **County PVAs may be eligible for state funding**
 - Subject to funding, consider septic-to-sewer retrofits and existing septic upgrades



Policy Considerations – Vacant Parcels in Vulnerable Areas

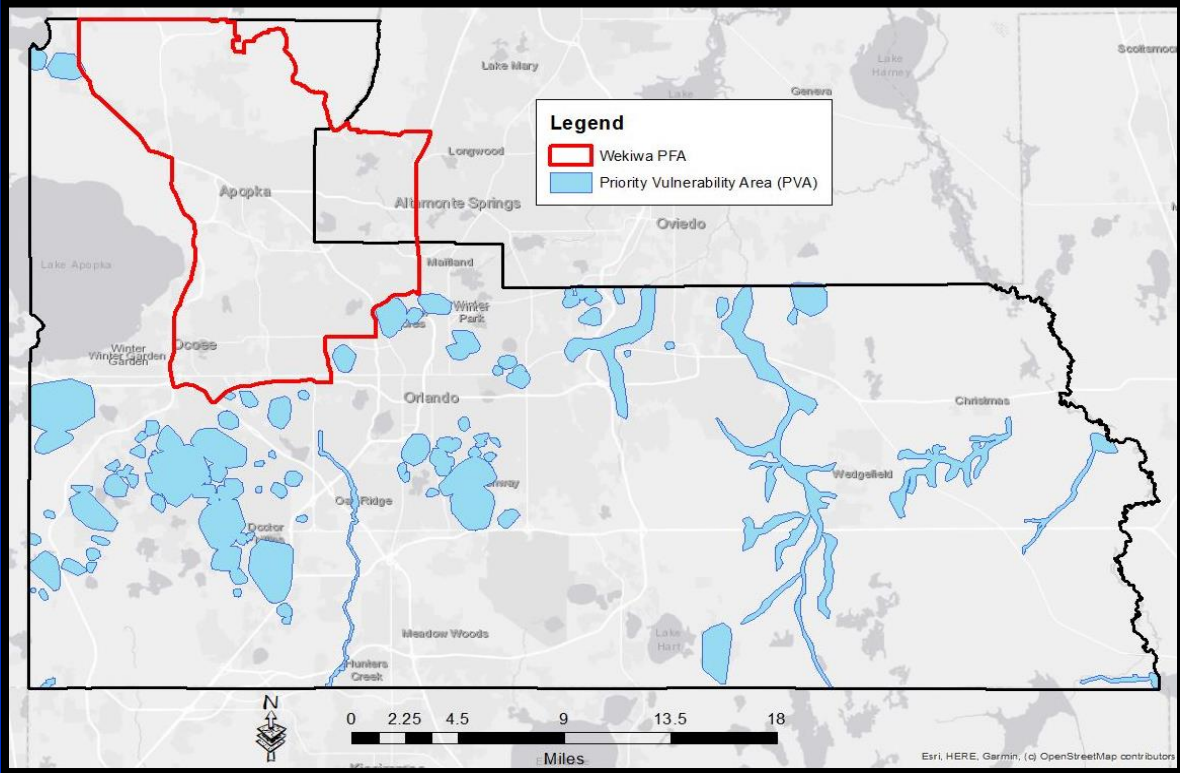




Policy Considerations – New Development

- Vacant parcels fronting pipelines in Vulnerable Areas
 - Applies to wastewater flows ≤ 2 ERU
 - Current requirement: New development shall connect to sewer if fronting a gravity pipeline
 - Recommendation: New development shall connect to sewer if fronting a gravity pipeline or a force main
 - Additional cost: \$5K – \$15K

Vulnerable Areas





Policy Considerations – New Development

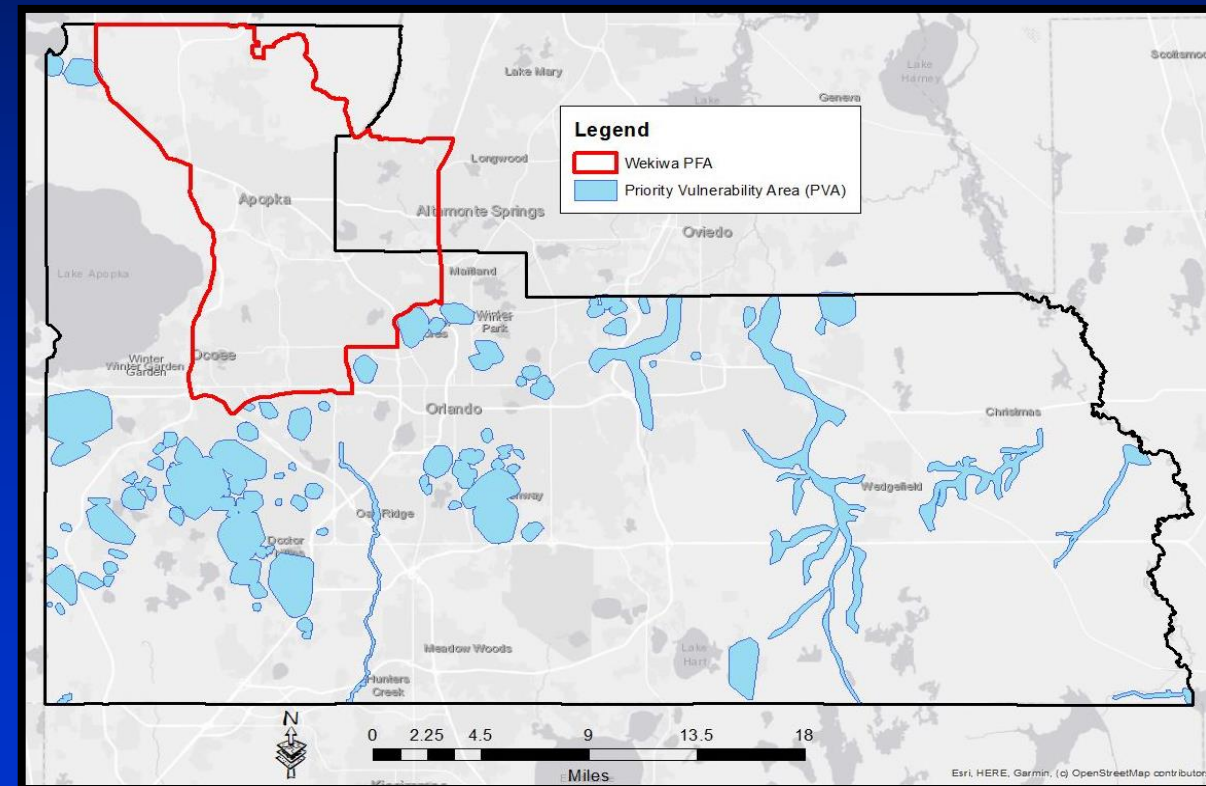
Municipality	Commercial Max Distance	Industrial Max Distance	Subdivision Max Distance
State of Florida	50 feet	$\frac{1}{4}$ mile	$\frac{1}{4}$ mile
Jacksonville, Kissimmee Broward County Miami-Dade County Palm Beach County	Follows State Statutes	Follows State Statutes	Follows State Statutes
Orlando	100 feet	Follows State Statutes	Follows State Statutes
Orange County (Existing)	100 feet	Follows State Statutes	1 mile
Seminole County Sarasota County	150 feet	Follows State Statutes	Follows State Statutes
Osceola County Boca Raton	200 feet	Follows State Statutes	Follows State Statutes
Orange County (Proposed)	600 feet	Follows State Statutes	1 mile
Hillsborough County	Required to Connect	Required to Connect	Required to Connect



Policy Considerations – New Development

- Vacant parcels by distance from pipelines in Vulnerable Areas
 - Applies to wastewater flows > 2 ERU
 - Current requirement: New development shall connect to sewer if pipeline is within 100 feet
 - Recommendation: New development shall connect to sewer if pipeline is within 600 feet
 - Additional cost: \$6K – \$54K

Vulnerable Areas

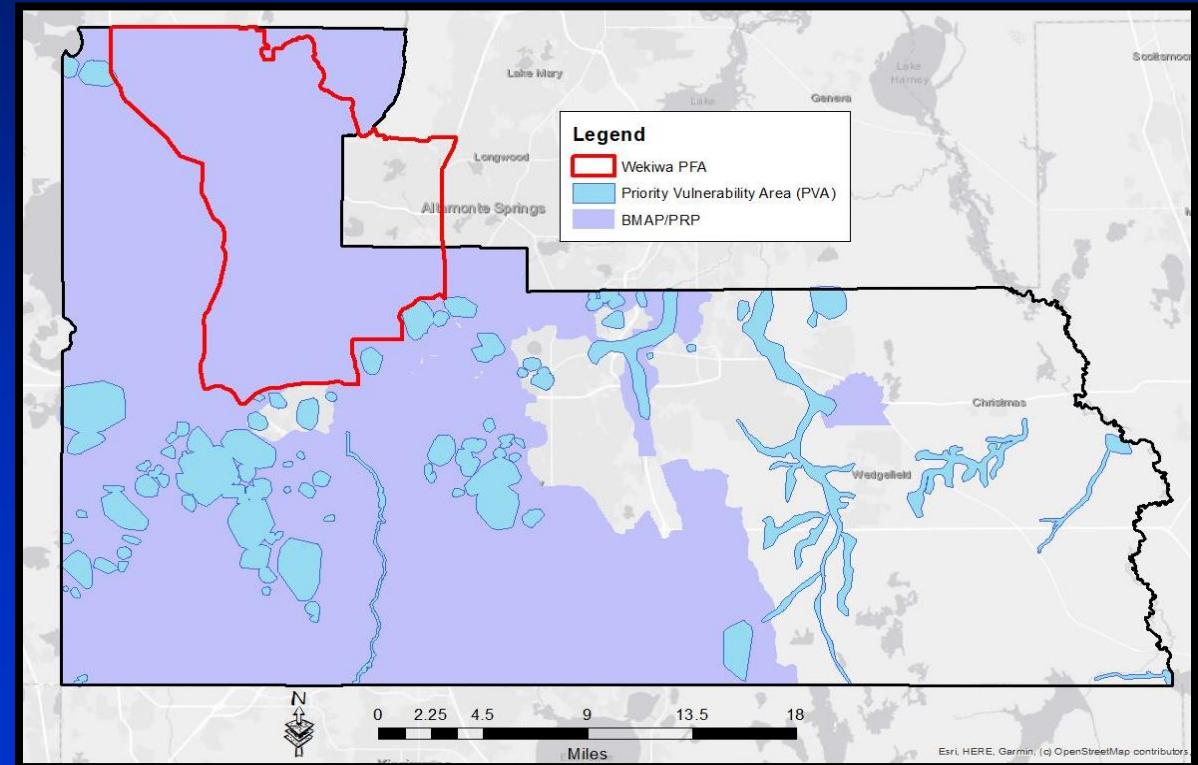




Policy Considerations – New Development

- Where sewer is not available on lots ≤ 1 acre in County PVAs
 - Require enhanced septic systems with 65% nitrogen reduction
 - State already requires in the **BMAPs/PRPs**
- Variances for septic systems less than 150 feet from any waterbody
 - Require enhanced septic systems with 80% nitrogen reduction
- Additional cost: \$10K – \$15K

Vulnerable Areas and BMAPs/PRPs





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Recommendations

▪ New Development in Vulnerable Areas

1. Increase sewer connection requirements

- Wastewater flows \leq 2 ERU – connect to fronting gravity main or force main
- Wastewater flows $>$ 2 ERU – connect to sewer pipeline within 600 feet

2. Require enhanced septic systems

- 65% nitrogen reduction – for new systems on lots $<$ 1 acre
- 80% nitrogen reduction – for new systems less than 150' setback to any waterbody (countywide)

▪ Existing Septic Systems

3. Continue septic-to-sewer and septic upgrade initiatives in Vulnerable Areas if funding is available

▪ Actions Needed

- Agreement with FDEP for enforcement of the County's septic system requirements for new development – eliminates staff inefficiencies
- County ordinance for proposed code changes for new development



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Stakeholder Engagement

- **Policymakers (Orange County BCC)**
- **State Agencies (FDEP, FDOH, SJRWMD, SFWMD)**
- **Municipalities**
- **Septic Tank Industry (equipment vendors, installers, maintenance entities)**
- **Development Community (residential/commercial developers, builders, contractors, engineers, attorneys)**
- **Environmental Groups**
- **Orange County Residents, Homeowners, and Visitors**



Stakeholder Engagement

■ Outreach

– June 2023

- Groundwater Vulnerability Assessment (GVA) Website

– December 2023

- Environmental Protection Commission (EPC)

– January 2024

- Design Advisory Board (DAB)
- Sustainability Advisory Board (SAB)
- Greater Orlando Builders Association (GOBA)

■ Majority of stakeholders supported staff recommendations

– February 2024

- Master Custom Builder Council (MCBC)
- Planning and Zoning Commission (PZC)
- Septic Tank Workgroup & Septic Upgrade Incentive Websites
- Septic Tank Workgroup Webinar





Stakeholder Engagement

■ Septic Tank Workgroup

- ocfl.net/SepticTankWorkgroup
- SepticTankWorkgroup@ocfl.net

■ Septic Upgrade Incentive Program

- ocfl.net/environment/SepticPollutionPrevention.aspx
- OCNeighborhoods@ocfl.net

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SEPTIC TANK workgroup

Septic systems can provide safe, cost-effective wastewater treatment options where centralized sewer systems are not available. With over 85,000 septic tanks in Orange County, a workgroup was created to evaluate the environmental impact and appropriate use of conventional septic systems. The Septic Tank Workgroup is a collaboration between county staff and the Florida Department of Health with subgroups focused on:

- New Development
 - Connections to Central Sewer
 - Septic Tank Standards and Permitting
- Existing Systems
 - Septic to Sewer Connections
 - Septic Tank Upgrades

IMPORTANT DOCUMENTS AND RESOURCES

Presentations

- 2/27/24 Stakeholder Presentation
Video | PowerPoint
- 9/13/22 BCC
Video | PowerPoint
- 8/30/22 BCC
Video | PowerPoint
- 7/12/22 BCC
Video | PowerPoint
- 6/21/22 BCC
Video | PowerPoint
- 2/22/22 BCC
Video | PowerPoint

Other Links

- Wekiva Spring and Rock Springs Basin BMAP
- Resources for Septic Tank Owners

Acronyms

BMAP - Basin Management Action Plan

PFA - Priority Focus Area

PRP - Pollution Reduction Plan

PVA - Priority Vulnerability Area

Background

Reasons to Address Septic Systems

Identifying Vulnerable Areas



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Next Steps and Schedule

- **Draft Ordinance Discussion**
 - BCC (August 2024)
- **Ordinance Public Hearings**
 - EPC and PZC (October 2024)
 - BCC (November 2024)



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Summary

- **Conventional septic systems can provide safe, effective wastewater treatment in non-vulnerable areas**
- **Recommend more stringent requirements to connect to sewer or upgrade to enhanced septic systems for new development in Vulnerable Areas**
- **Need proposed code changes for new development to enforce recommendations**
- **Met with the stakeholders and discussed staff recommendations**
- **Ordinance needed to implement staff recommendations**



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Policy Direction

- Staff looking to prepare an ordinance to implement proposed code changes
- Staff requests BCC concurrence of the following recommendations:
 - New Development in Vulnerable Areas
 1. Increase sewer connection requirements
 - Wastewater flows \leq 2 ERU – connect to fronting gravity main or force main
 - Wastewater flows $>$ 2 ERU – connect to sewer pipeline within 600 feet
 2. Require enhanced septic systems
 - 65% nitrogen reduction – for new systems on lots $<$ 1 acre
 - 80% nitrogen reduction – for new systems less than 150' setback to any waterbody (countywide)
 - Existing Septic Systems
 3. Continue septic-to-sewer and septic upgrade initiatives in Vulnerable Areas if funding is available
 - Leave existing systems alone
 - Follow the direction of the State