

**Please complete the notecard with the information as follows.**

\_\_\_\_\_  
HOA or Area

\_\_\_\_\_  
First and Last name

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Phone

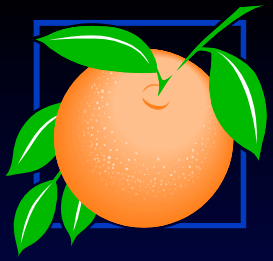
\_\_\_\_\_  
E-mail

# **WEKIWA SPRINGS AREA SEPTIC TANK RETROFIT PROJECT**

Orange County  
Board of County Commissioners

District 2 – Our Community Meeting

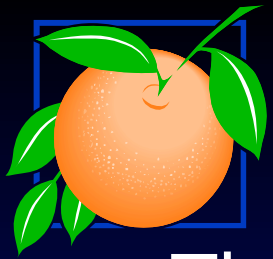
September 10, 2019



# Presentation Outline

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- Background

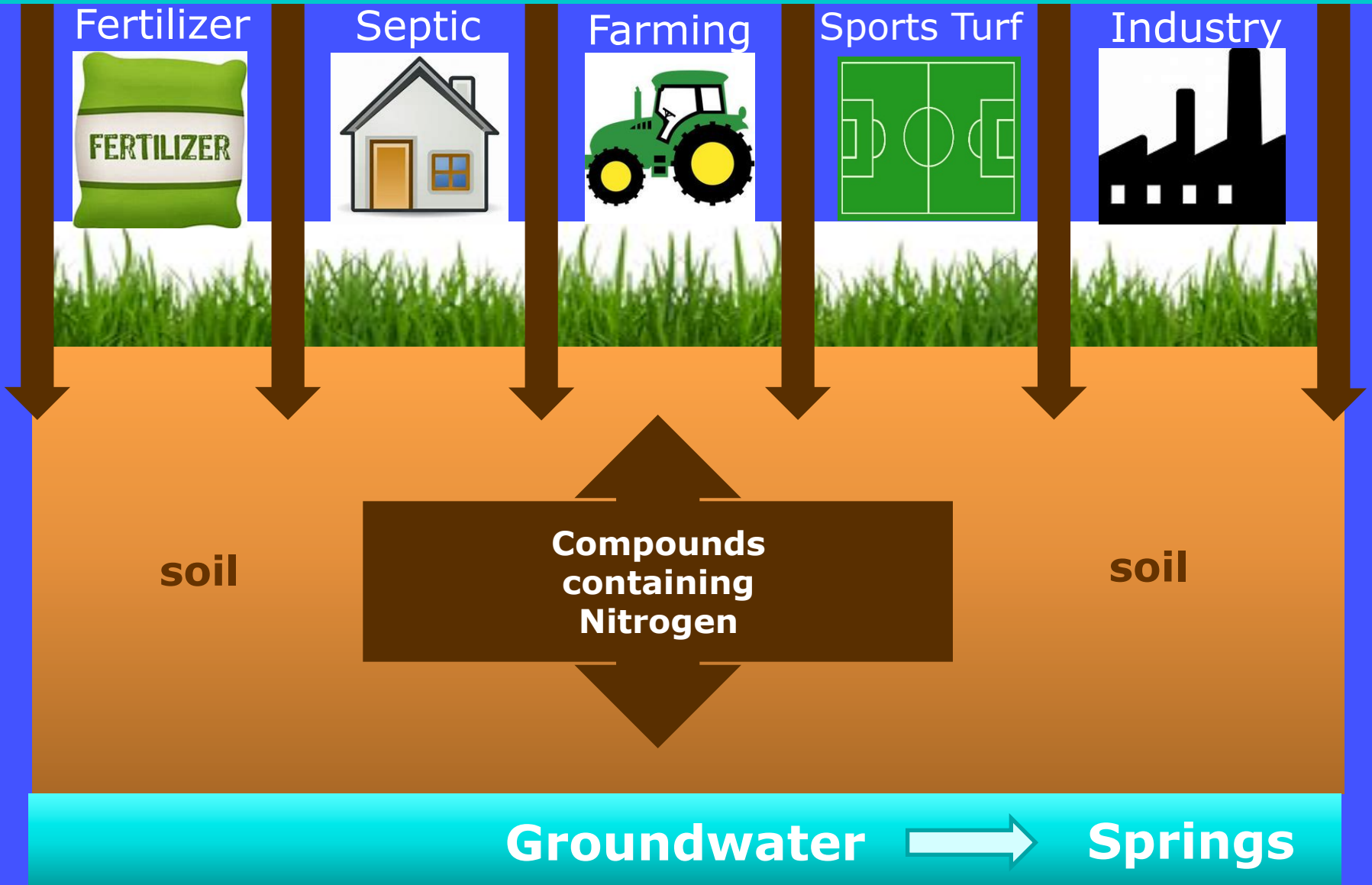


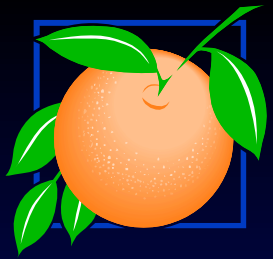
# Background

- The Wekiva River and Rock Springs Run are impaired for nutrients:
  - phosphorus and
  - the **nitrate** form of nitrogen
- Excess nutrients cause overabundance of algae
- Algae can cause
  - fish kills
  - smother river bottom
  - Reduce the diversity of plants and animals



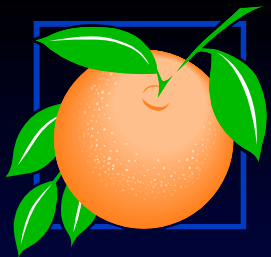
# Nitrogen Sources





# Background

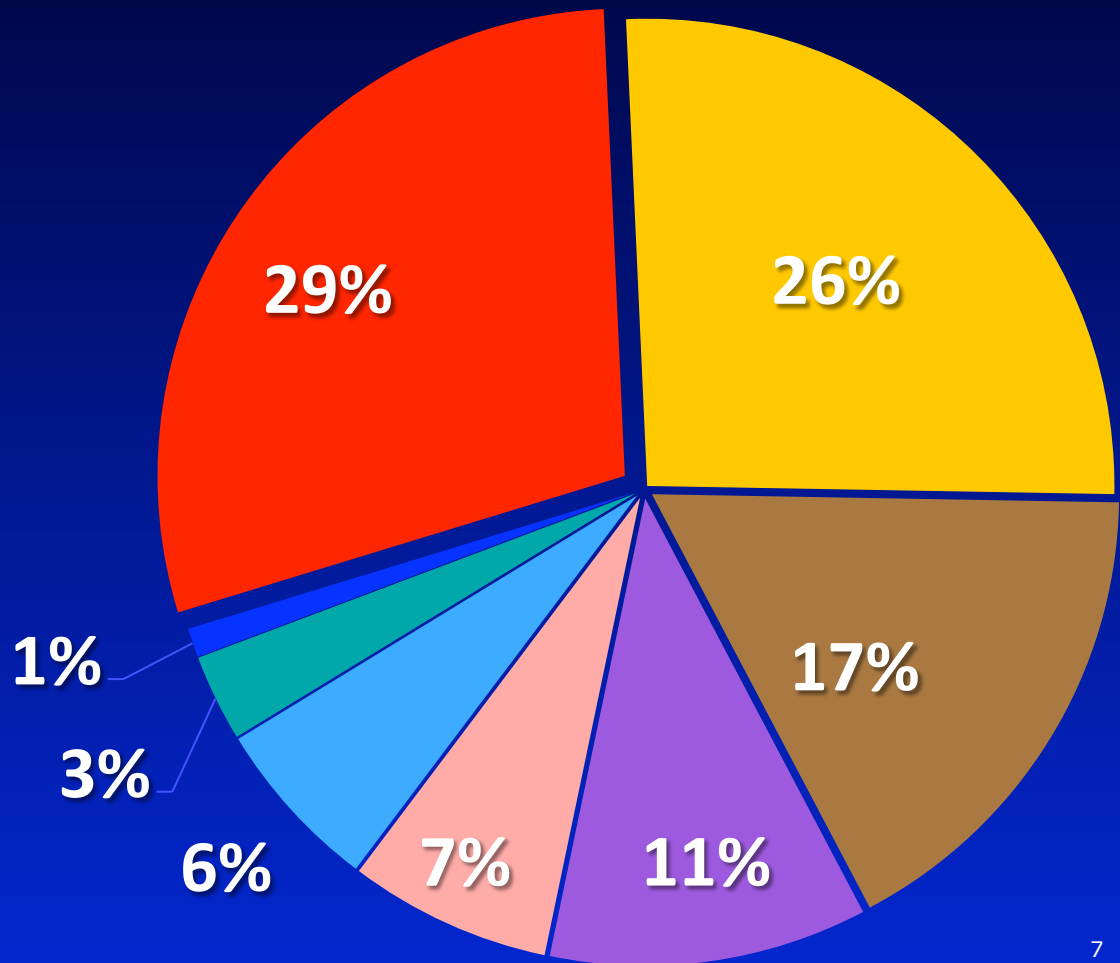
- Spring protection initiatives have been ramping up for more than 15 years
  - 2007 – Wekiva River&Wekiwa Springs/Rock Springs Run/Little Wekiva Canal impaired
  - 2008 – Total Maximum Daily Load (TMDL ) completed – reductions identified
  - 2015 – Wekiva River/Rock Springs Run Basin Management Action Plan (BMAP)
  - 2016 – Springs and Aquifer Protection Act
  - 2018 – Wekiwa and Rock Springs BMAP
  - 2019 – Springs BMAP on hold due to legal challenge

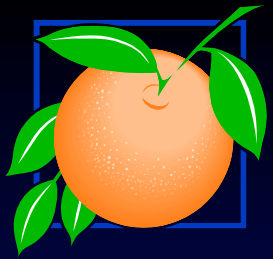


# Background

## Nitrogen Loading Sources

- Septic Systems
- Urban Fertilizer
- Wastewater Trt Facility
- Farm Fertilizer
- Sports Turf
- Atmospheric Deposition
- Nurseries
- Livestock Waste

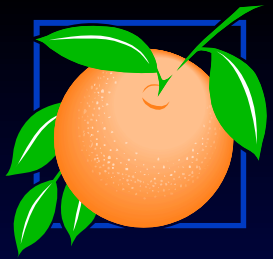




# Background

- 2016 Florida Springs and Aquifer Protection Act requires update to BMAP
  - Creates Priority Focus Area (PFA) Boundary
  - 5, 10, 15 year milestones
  - 100% reduction plan by year 15
  - Requires treatment of septic loads
  - Requires education plan
  - Orange County is the largest stakeholder
  - Significant financial investment is required to meet State standards





# Background

## Priority Focus Area Requirements

- Remediation plan for any BMAP where septic tanks contribute to more than 20% of load to an Outstanding Florida Spring
  - Target lots on less than 1 acre
  - Target lots where groundwater is most vulnerable
- FDOH permitting authority for Septic systems
  - Failure of existing system – future drainfield upgrade or connect to sanitary system if available (not currently being implemented)
  - New subdivisions – install enhanced drainfield or be subject to future sewer connection if identified in 5 years

# Wekiva BMAP

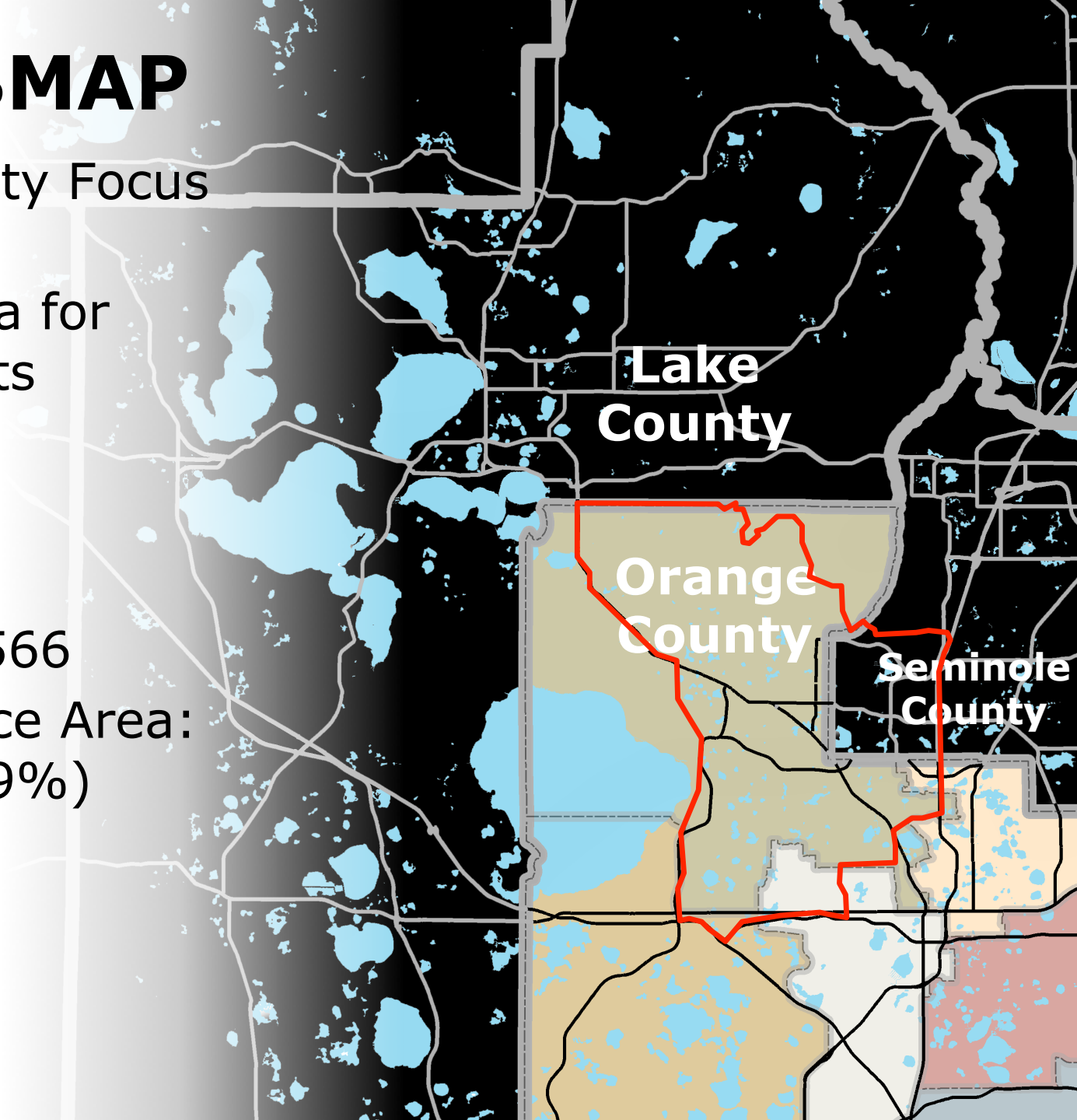
Wekiva Priority Focus  
Area (2016)

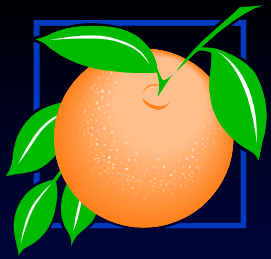
Targeted area for  
septic projects

Septic Tanks

Total: 32,566

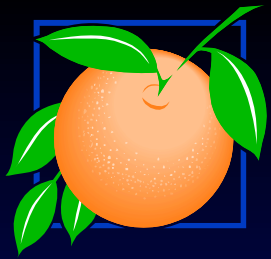
OCU Service Area:  
19,194 (59%)





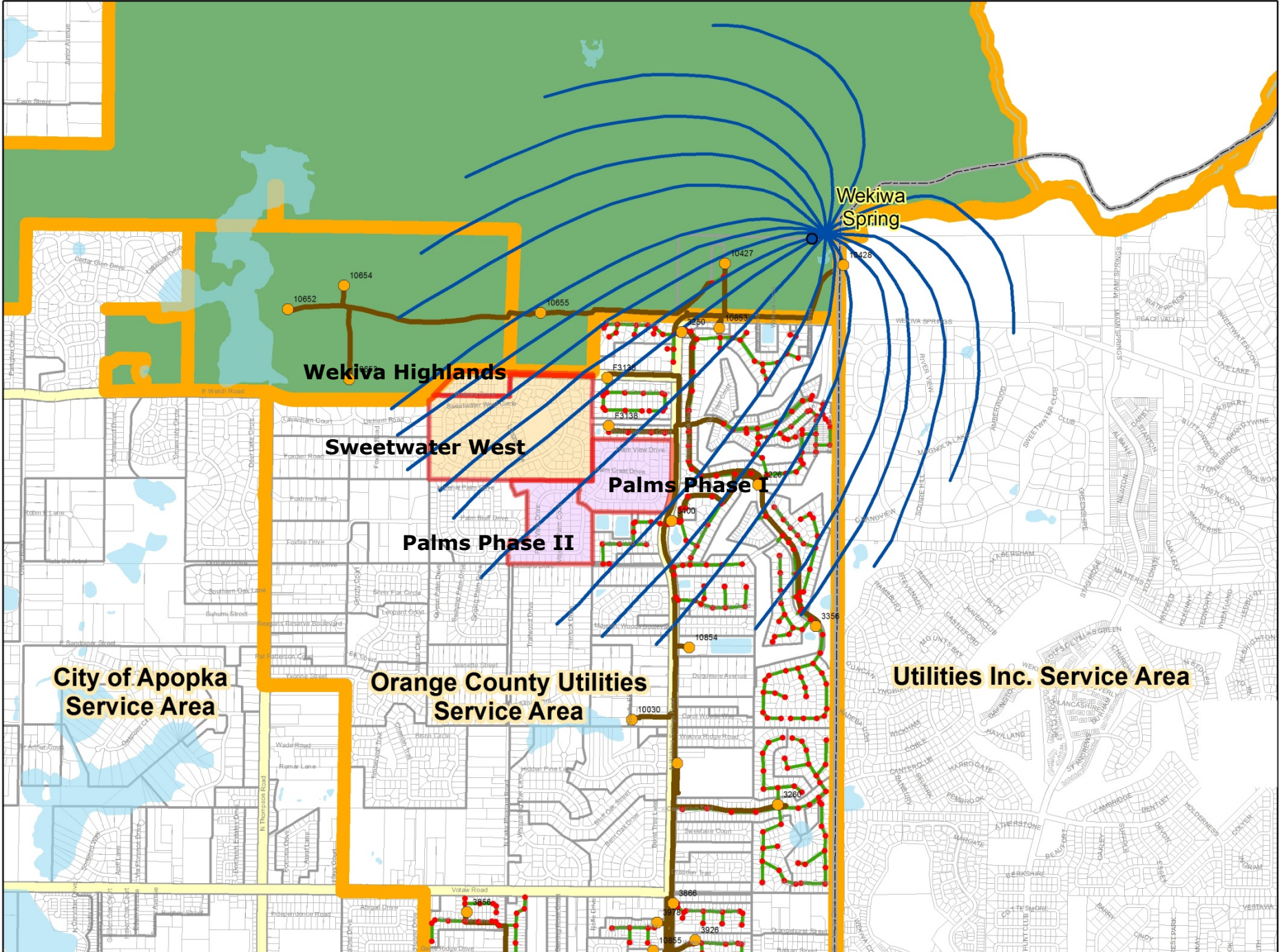
# Background

- **Onsite Sewage Treatment Disposal System (OSTDS) Remediation Plan Requirements (lots < 1 acre in PFA)**
- **Two Options:**
  - 1 – OSTDS (septic) **enhancement** defined as meeting (~65% or more nitrogen reduction):
    - Aerobic Treatment Units (ATU) NSF – 245 compliant
    - INRB – In ground nitrogen-reducing biofilter
    - Nitrogen reducing Performance based treatment systems (PBTS)
  - 2 – Connect to Central Sewer



# Background

- Prior Septic Tank Retrofit Project
- In 2014
  - Community Meeting Held
  - Board of County Commissioners Workshop and Public Hearing
    - Changes to Chapter 37 Code amendment authorizing up to 25% of a septic tank or potable well retrofit project when other program cover at least 75% of all project costs
  - Projected totals \$9 million with grants = 6.75 million of the \$9 million for 213 lots
  - Project stalled due to lack of interest and action



**Wekiiva Spring**

**Wekiiva Highlands**

**Sweetwater West**

**Palms Phase I**

**Palms Phase II**

**City of Apopka  
Service Area**

**Orange County Utilities  
Service Area**

**Utilities Inc. Service Area**

10652

10654

10655

10427

10428

F3120

F3138

1000

10654

3366

10030

3260

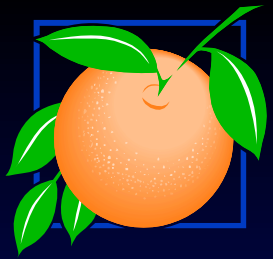
3866

3978

10855

3926

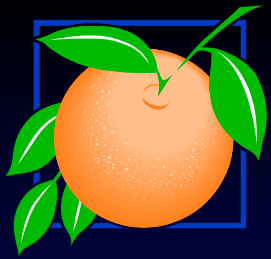
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# Background

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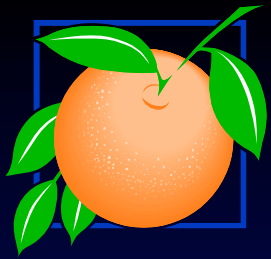
- PROJECT BEING RECONSIDERED
  - Opportunity exists for renewed source of money
  - District 2 Commissioner Christine Moore is actively leading and pursuing funding sources
  - Recent legislation requiring septic tanks to be replaced or upgraded – Onsite Sewage Treatment and Disposal System (OSTDS) Remediation Plan



# Septic to Sewer

## Alternatives to Septic Tank

Septic Tank Improvements	Cost per Lot
Gravity Collection	\$60,000
Pressure System	\$30,000
Advanced Treatment Unit (ATU)	\$15,000 to \$20,000
Drainfield Replacement	\$5,000 to \$10,000



# Project Information

- Potential Funding

- Per Homeowner Costs With Grant Money - \$5,800

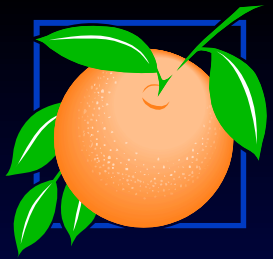
- Total Projects Cost \$21.28M

- Orange County \$5.32M (25%)

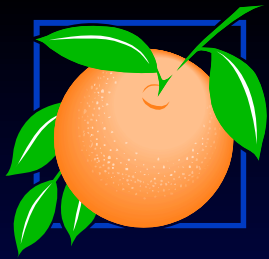
- State Grants\* \$13.832M (65%)

- Homeowners \$2.128M (10%)





**Questions?**



# Next Meetings

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- October 15, 2019
  - Clay Springs Elementary School
  - Time: 6:30 PM – 7:30 PM
  
- November 5, 2019
  - Clay Springs Elementary School
  - Time: 6:30 PM – 7:30 PM