Utilities Department

BCC Work Session

Septic Tank Workgroup Subgroup A – New Development Connections to Central Sewer

July 12, 2022



- Background
- Subgroup A Details
- Existing Connection Requirements
- Policy Considerations
- Potential Future Connection Requirements
- Next Steps



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- Septic tanks can provide safe, cost-effective wastewater treatment
 - -Used in rural areas or where centralized sewer systems are not available
 - -Should be located a safe distance from water bodies and groundwater
- The Septic Tank Workgroup was created to address appropriate use of septic tanks
 - -Subgroup A is evaluating new development connections to central sewer
 - -Subgroup B is evaluating existing septic-to-sewer connections
 - -Subgroup C is evaluating existing septic tank upgrades
 - -Subgroup D is evaluating new septic tank standards and permitting



- Stakeholders
 - -Policy Makers (Orange County BCC)
 - -State Agencies (FDEP, FDOH, SJRWMD, SFWMD)
 - -Municipalities
 - -Septic Tank Industry
 - (equipment vendors, installers, maintenance entities)
 - -Development Community
 - (commercial, industrial, and residential developers)
 - **Environmental Groups**
 - -Orange County Residents, Homeowners, and Visitors



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Subgroup A – New Development Connections to Central Sewer

–Define connection requirements

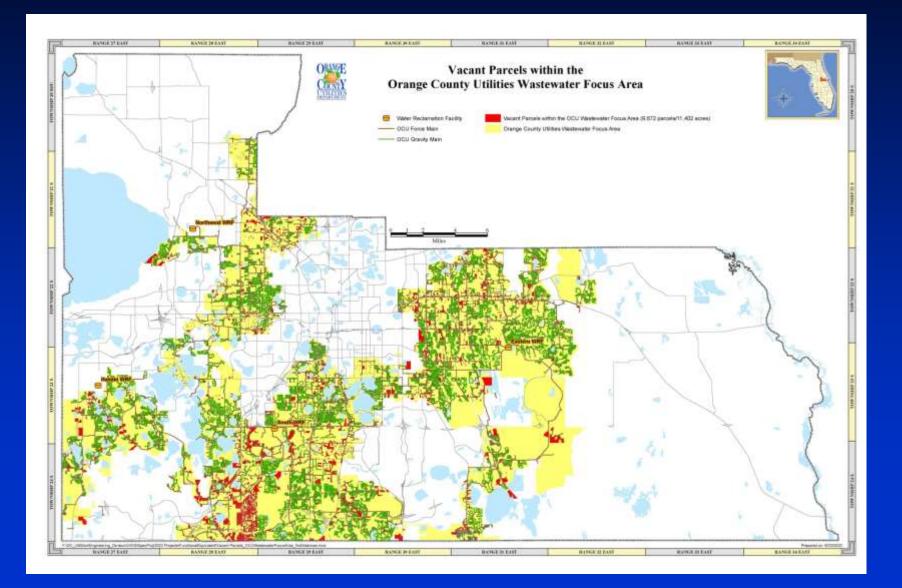
- Environmentally vulnerable areas versus non-vulnerable
- Urban Service Area and functional equivalent (Focus Area)
- By zoning/land use, parcel size, wastewater flow, distance to infrastructure
- -Draft updates to Orange County Code and Comprehensive Plan
 - Existing requirements established more than 25 years ago
 - Propose new requirements for environmentally vulnerable areas



Focus Area Description – Urban Service Area and functional equivalent plus city boundaries within Orange County Utilities wastewater service area

Vacant Parcel – Vacant parcels outside PDs and planning areas already required to connect to sewer by board action







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Existing Connection Requirements

Residential

- -Multifamily Apartments
- -Subdivisions
- -Triplex/Quads (>2 ERU)
- -Duplex and Single-family (<2 ERU)
- Commercial
 - -Flow > 600 gpd (>2 ERU)
 - -Flow <= 600 gpd (<2 ERU)
- Industrial
 - -Industrial Flow
 - **–Domestic Flow**

Regardless of distance 1 mile 100 feet Gravity abutting parcel

100 feet

Gravity abutting parcel

Regardless of distance

¹/₄ mile

Existing Connection Requirements

- Typical Costs Residential (1 ERU)
 - -Conventional Septic \$15,000
 - -Advanced Septic \$25,000
 - -Grinder Pump Station \$30,000 plus \$108/foot of force main
- Typical Costs Commercial/Industrial (2 ERU)
 - -Conventional Septic \$24,000
 - -Advanced Septic \$48,000
 - -Pump Station \$54,000 plus \$108/foot of force main

Existing Connection Requirements

Municipality	Commercial Max Distance	Industrial Max Distance	Subdivision Max Distance
State of Florida	50 feet	¼ mile	¼ 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
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	100 feet	Follows State Statutes	1 mile
Hillsborough County	Required to Connect	Required to Connect	Required to Connect



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Potential Policy Requirements in Highly Vulnerable Areas

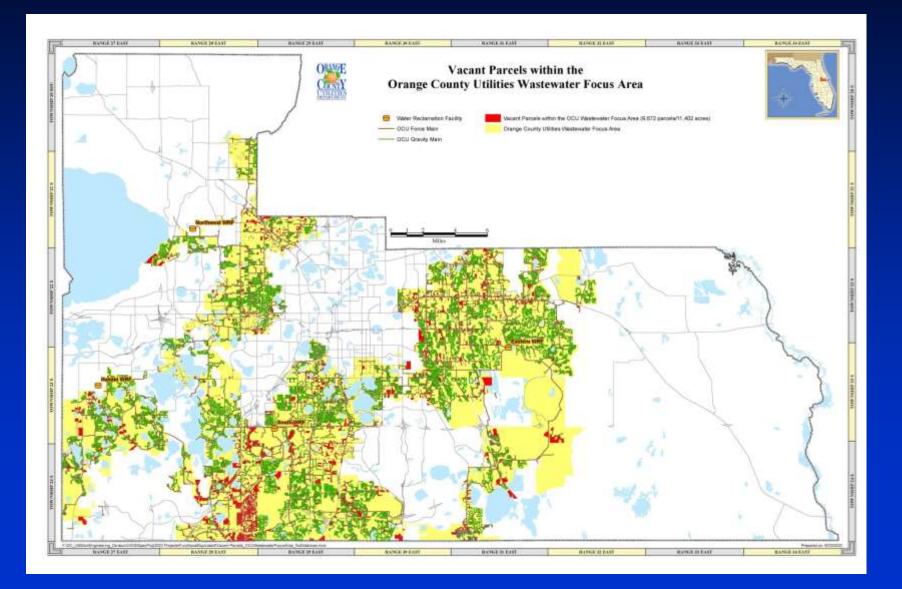
-Option 1: Install advanced treatment system

- No new conventional septic tanks allowed in vulnerable areas
- -Option 2: Connect to central sewer
 - Increase distance requirements for definition of "available" wastewater pipes
 - Add more sewer pipes (redevelopment areas)

Non-Vulnerable Areas – No proposed changes at this time

- -Septic tanks can provide safe, cost-effective wastewater treatment
- -Used in rural areas or where centralized sewer systems are not available
- -Should be located a safe distance from water bodies and groundwater







Vacant Parcels Fronting Wastewater Pipelines

Pipeline	Parcels*	Percentage of Parcels	Acres	Percentage of Acreage
Gravity	3,248	33.7%	1,445	12.7%
Gravity or Force Main	4,828	50.0%	5,782	50.7%

*Applies to wastewater flows < 2 ERU



Vacant Parcels Sorted by Distance from Wastewater Pipelines

Distance	Parcels*	Percentage of Parcels	Acres	Percentage of Acreage
100 feet	5,140	53.3%	6,302	55.3%
200 feet	5,914	61.3%	7,253	63.6%
400 feet	6,859	71.1%	8,328	73.0%
600 feet	7,625	79.0%	8,892	78.0%
800 feet	8,018	83.1%	9,298	81.6%
1,000 feet	8,318	86.2%	9,580	84.0%
¼ mile	8,627	89.4%	9,886	86.7%
½ mile	9,226	95.6%	10,747	94.3%
1 mile	9,644	99.9%	11,388	99.9%
Any distance	9,652	100.0%	11,401	100.0%

*Applies to > 2<u>ERU</u>

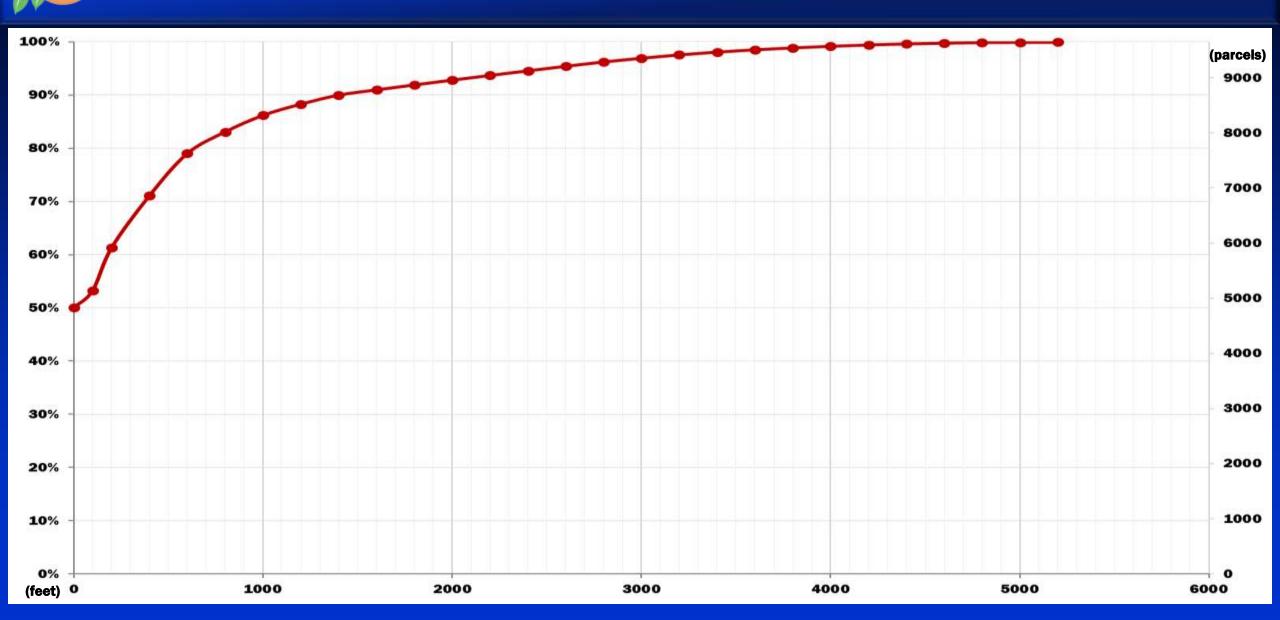
Policy Considerations

There are about 9,700 vacant parcels within the Focus Area

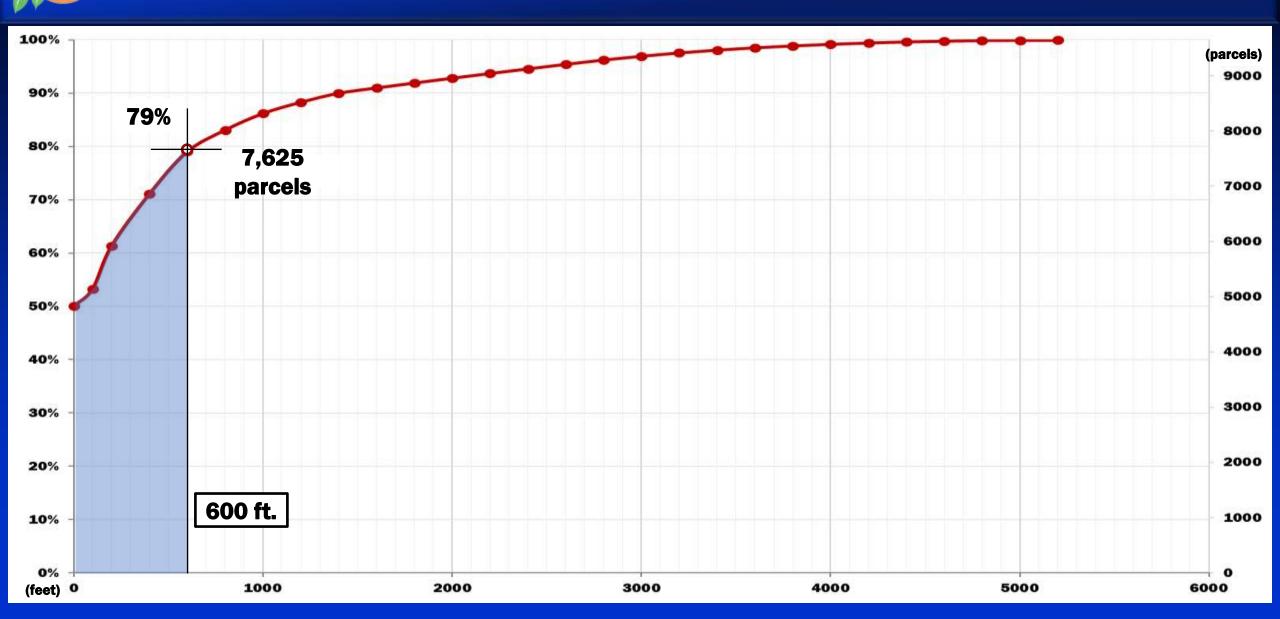
- -Other than subdivisions and industrial uses, the farthest extension requirement is currently 100 feet
 - Half of all vacant parcels in the Focus Area are within 100 feet of a wastewater pipe
- -To increase the number of parcels required to connect to sewer, the required distance would have to increase

 The results of the vulnerability study will determine the actual number of vacant parcels in highly vulnerable areas

Policy Considerations



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Potential Future Connection Requirements

Regardless of distance

- Residential (Highly Vulnerable Areas)
 - -Multifamily Apartments
 - -Subdivisions
 - -Triplex/Quads
 - -Duplex and Single-family

1 mile

Up to 600 feet

Pipe abutting parcel

Nonresidential (Highly Vulnerable Areas) –Industrial

- Industrial Flow
- Domestic Flow

Domestic Flow

Commercial

-Flow > 2 ERU

-Flow <= 2 ERU</pre>

Regardless of distance ¼ mile

Up to 600 feet Pipe abutting parcel

Potential Future Connection Requirements

2095 Murdock



- Permit: B19903230
- Use: New storage building
- Flow less than 600 gallons per day
- Available main: FM
- Current standards: Not required to connect to sewer
- Proposed changes: Required to connect to sewer
- Cost (gravity): \$21,000
- Cost (conventional septic): \$24,000
- Cost (advanced septic): \$48,000
- Cost (force main): \$54,000

Potential Future Connection Requirements

729 Charles



- Permit: RZ-22-03-002
- Use: Professional office
- Flow: Unknown
- Available main: FM 530 feet from property
- Current standards: Not required to connect to sewer
- Proposed changes: May be required to connect to sewer
- Cost (conventional septic): \$24,000
- Cost (advanced septic): \$48,000
- Cost (100 feet): \$65,000
- Cost (530 feet): \$111,000



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- Upcoming BCC Work Sessions for remaining subgroups
 - -July 26: Subgroup C Existing Septic Tank Upgrades
 - -August 30: Subgroup D New Septic Tank Standards and Permitting
- Completion of the vulnerability assessment
- Engage stakeholders
- Future BCC Work Session for Subgroup A
 - -Update vacant parcels statistics
 - -Refine proposed connection requirements

-Draft updates to Chapter 37 and the Comprehensive Plan

Public hearings (LPA and BCC)

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