



# STATE OF THE DISTRICT

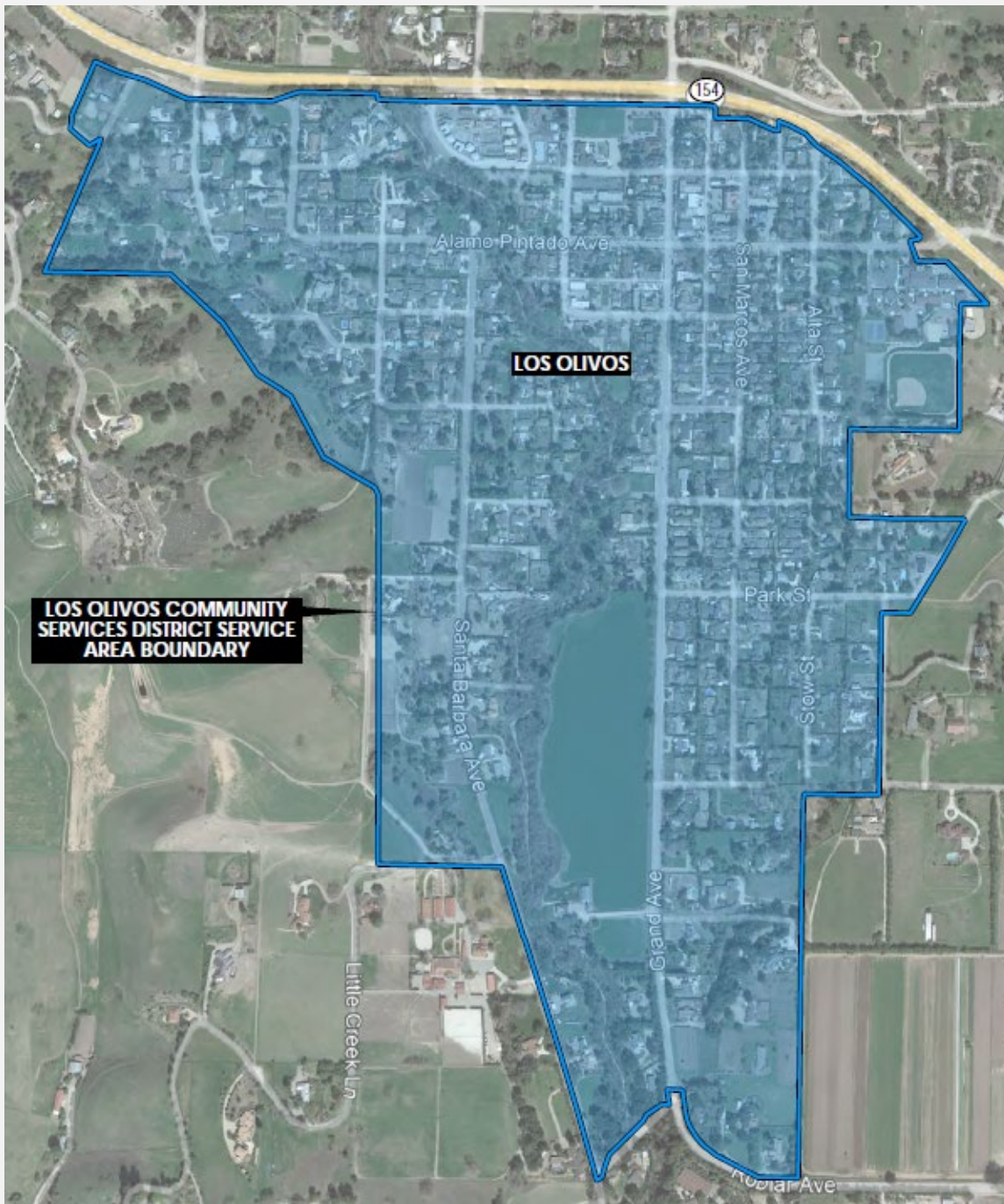
Guy Savage  
General Manager



## LOS OLIVOS COMMUNITY SERVICES DISTRICT

- Special Problems Area designation 1974
- District formed in January 2018 by voters
  - 73% of voters in favor of formation
  - Ensures local control
- If we didn't form, County could build a sewer or require connection to another facility
  - ➔ Doing nothing is not a long-term option





# THE DISTRICT

**384 Parcels**  
**~45 Commercial**  
**~339 Residential**



## WASTEWATER PROCESS SIMPLIFIED

**Collection** – takes effluent from your home and moves it to where it will be treated

**Treatment** – a series of physical and biological processes to separate contaminants in the waste stream

**Disposal** – reintroduces treated effluent into water cycle (injection, percolation, purple pipe reuse, other uses)



## KEY 2022 ACTIVITIES

- 30% design gravity collection
- 10-15% design Septic Tank Effluent Pumping (STEP) collection
- Membrane Bioreactor (MBR) treatment
- Passive Treatment
- Effluent disposal next Wednesday



## KEY 2022 ACTIVITIES CONTINUED

- Advanced on-site
- Two monitoring wells
- Initial assessment models, no answers yet



**LET'S BE  
CLEAR**

**Collection**

**Treatment**

**Disposal**

**Siting**

**Phasing**



DOUGHNUT SHOP



LET'S BE  
CLEAR

Collection

Treatment

Disposal

Siting

Phasing

**NO DECISIONS MADE!**





# THE YEAR AHEAD

-- SUBJECT TO CHANGE --

December

January

February

March

April

Late 2023?

Complete  
Studies

Discussion  
and Decisions

Environmental  
Review

Proposition  
218 Vote

12/14 – Regular Meeting Effluent Disposal Study

1/11 - Hybrid Regular Meeting **EHS/Waterboard Workshop**

1/17 - **Prop 218 Overview, Collection/Treatment/Disposal Workshop**

1/24 - **Phasing, Siting Workshop**

2/15 - Regular Meeting **Workshop Recap**

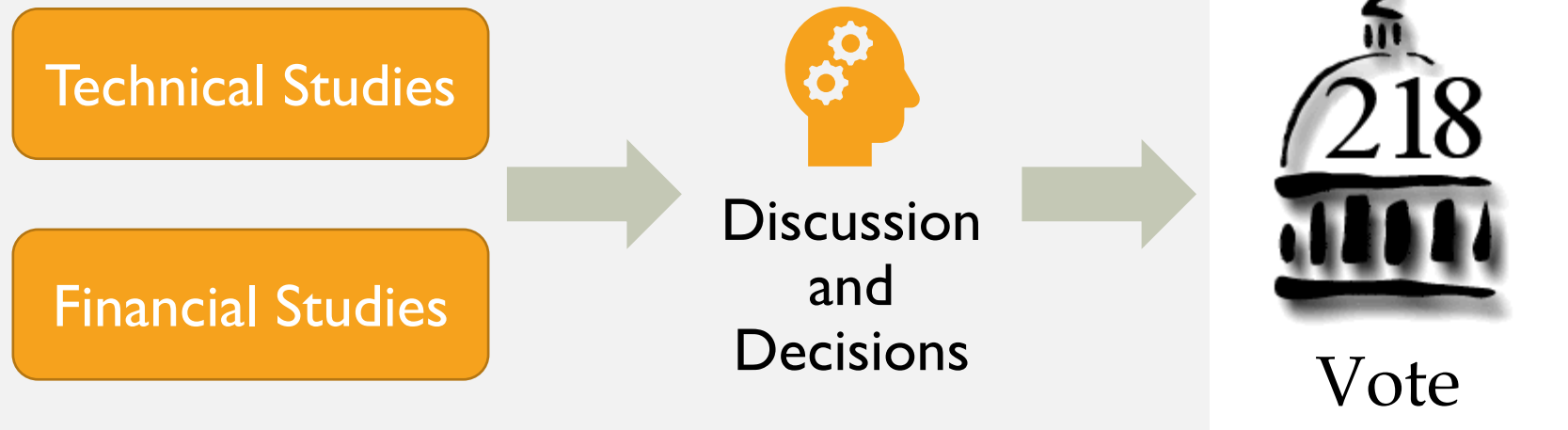
2/21 - **Financing/Project Description Workshop**

3/15 - Regular Meeting **Workshop Recap**

- - - - additional workshops as needed - - - -



# HOW DOES IT FIT TOGETHER?



# WHO VOTES FOR WHAT?

Registered voters within the District created the CSD and elect of officers

- Four officers elected in November 2022

District property owners have a benefit assessment vote in a Proposition 218



WHAT  
DOES IT  
MEAN TO  
ME?

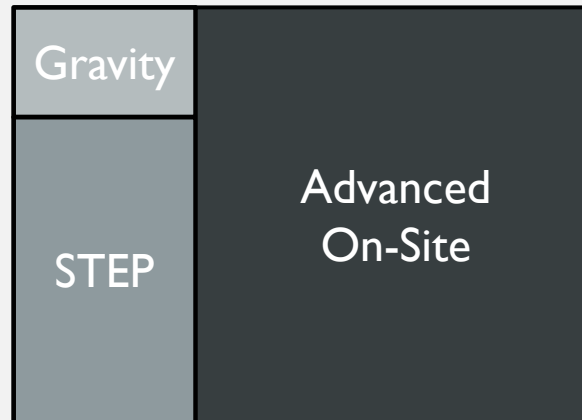


# IMPACT TO YOU AND YOUR PROPERTY

**Gravity Collection** – pipes only (deep enough for gravity)

**STEP Collection** – pipes, tank, electrical, pumping access

**Advanced On-Site** – permits, tank, electrical, treatment, filters, disposal field or method, pumping access



Note: With all three approaches, your existing septic tank becomes obsolete

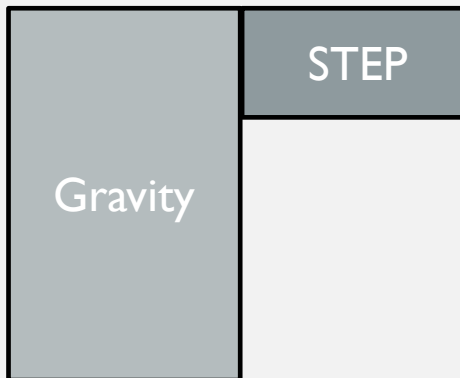


# IN THE COMMUNITY AND SITED PROPERTY

**Gravity** – pipes (deep enough for gravity), optional lift station, MBR treatment, disposal

**STEP** – smaller pipes (3-4' underground), MBR treatment, disposal

**Advanced On-Site** – No direct community impact (individual property owners only)



# 30% DESIGN GRAVITY COLLECTION WITH MBR TREATMENT

	North Option	South Option
Zone 1	\$30,300,000	\$28,700,000
Zone 2	\$ 1,700,000	\$ 1,700,000
Zone 3	\$15,800,000	\$15,800,000
<b>Total</b>	<b>\$47,800,000</b>	<b>\$46,200,000</b>

Operations and Maintenance: \$300 - 400k per year



# 10 - 15% DESIGN STEP COLLECTION WITH MBR TREATMENT

Construction	
Zone 1	\$ 22,035,500
Zone 2	\$ 1,516,500
Zone 3	\$ 13,507,000
<b>Total</b>	<b>\$37,059,000</b>

Operations and Maintenance: \$350-500k per year, plus electrical





# ADVANCED ON-SITE (EVERYTHING ON YOUR PARCEL)

Construction	
Per Residential Parcel	\$30,000-70,000
Case-by-case for use on commercial properties	n/a

Operations and Maintenance: \$1,500-1,900 per year, including permits and pumping



# WANT MORE???

- Visit us at:  
[www.losolivoscscsd.com](http://www.losolivoscscsd.com)
- Subscribe to our updates:  
[www.losolivoscscsd.com/subscribe](http://www.losolivoscscsd.com/subscribe)
- Contact me:  
Guy Savage  
[gm.locsd@gmail.com](mailto:gm.locsd@gmail.com)  
(805) 500-4098



**QUESTIONS  
AND  
DISCUSSION**

**U S POST OFFICE  
LOS OLIVOS CAL  
Ca 93441**



# BACKUP SLIDES



# BASICS



# WASTEWATER AND GOVERNMENT SPEAK

LAFCO

CEQA

MBR

WRF

UV

GMP

STEP

GSA

TDS

WWTP

RWQCB

WWMP

SPA

OWTS

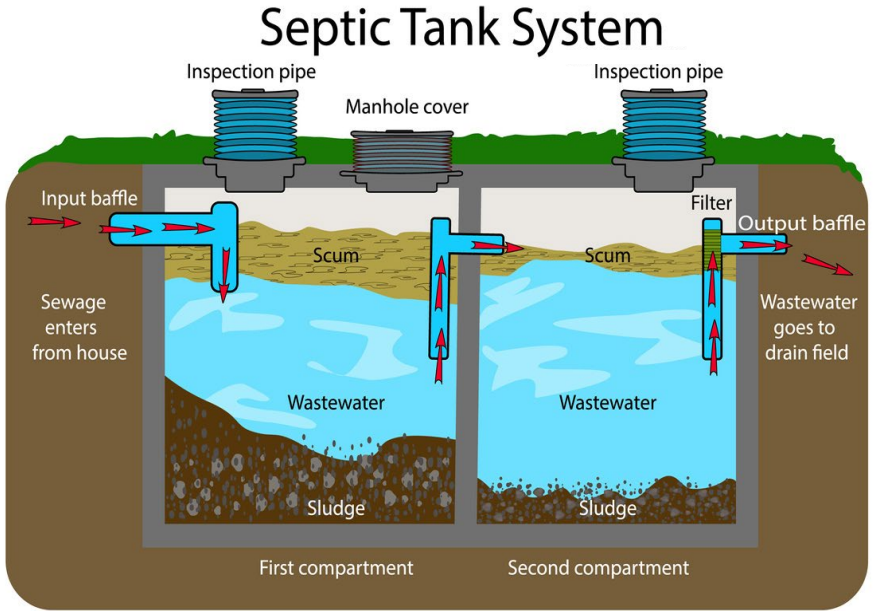
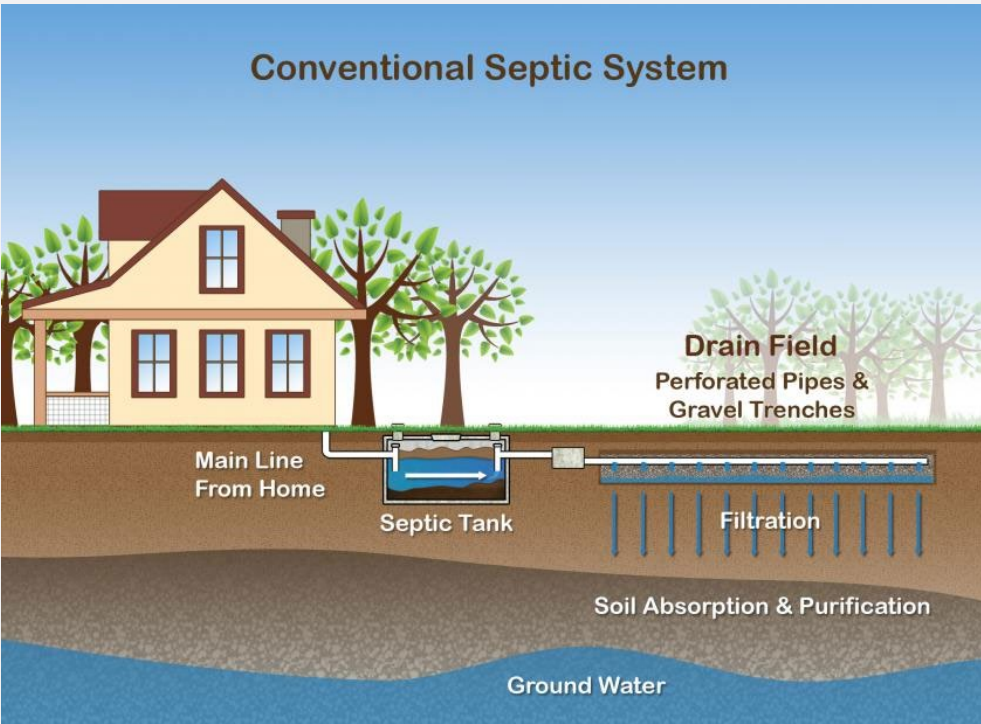
PER

ROW

EHS



# SEPTIC TANK SYSTEM



# ALTERNATIVES TO SEPTIC SYSTEMS

Advanced On-Site systems  
(aka full treatment on-site)

Gravity collection

Septic Tank Effluent Pumping  
(STEP) collection / treatment

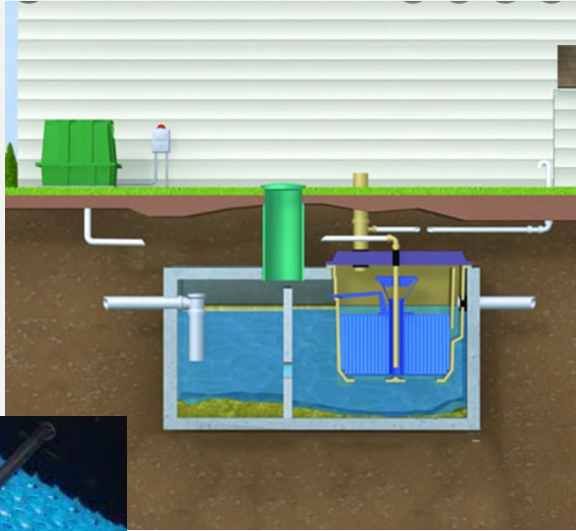
Treatment

Disposal





# ADVANCED ON-SITE SYSTEM (EVERYTHING ON-SITE)



# GRAVITY FED COLLECTION



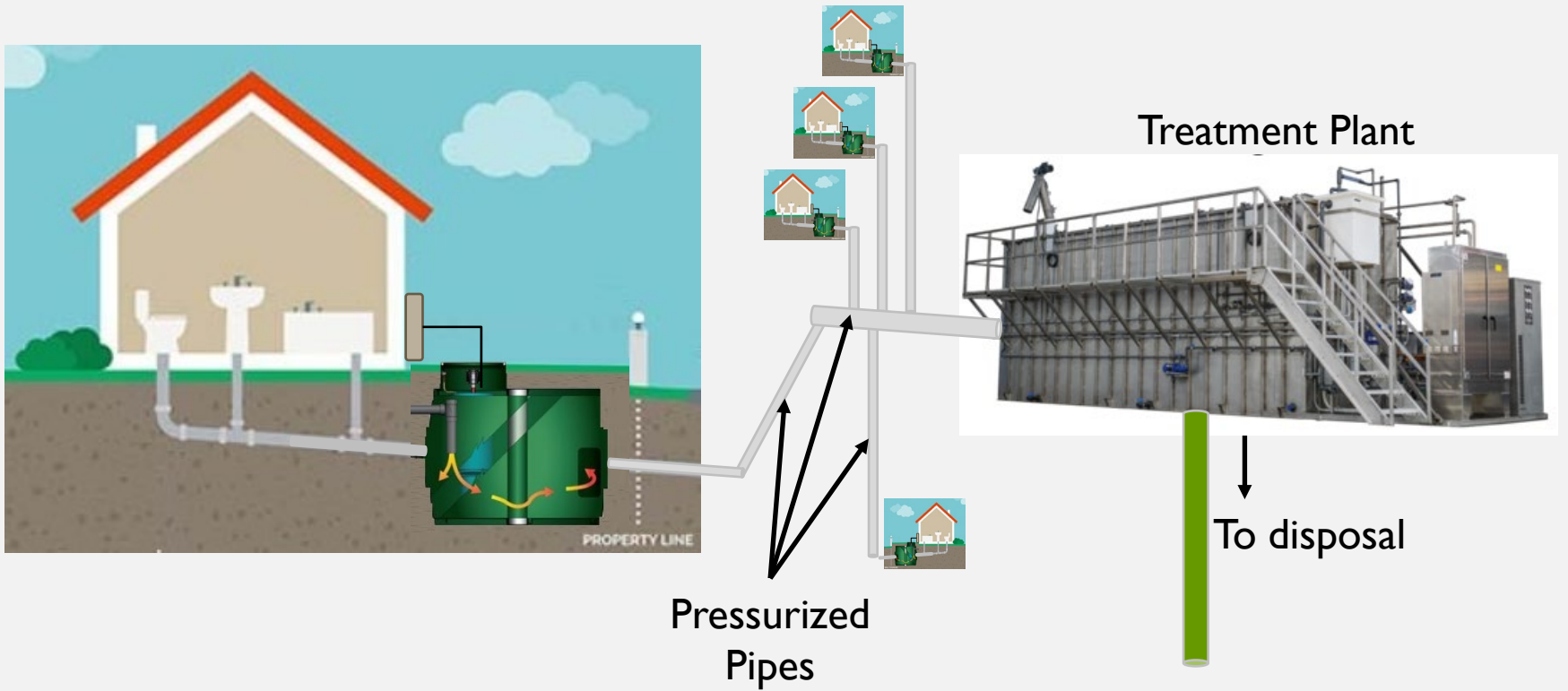
Treatment Plant



To disposal



# SEPTIC TANK EFFLUENT PUMPING (STEP)



# HISTORY



# THE BRIEFEST HISTORY

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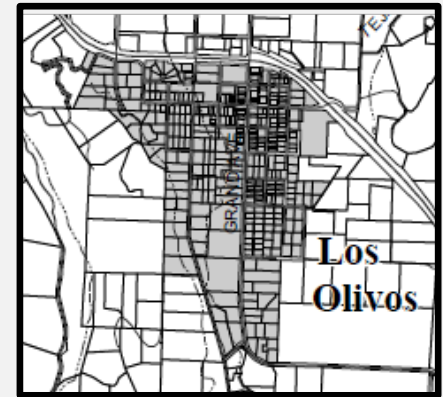


# WHAT HAPPENED PRIOR TO FORMATION?

## 2009 SANTA YNEZ VALLEY COMMUNITY PLAN

[WEBSITE LINK](#)

- Established “urban” planning boundaries
- Set specific goals for land use and infrastructure
- Wastewater discussion begins on page 109



### Policy WW - SYV - 3:

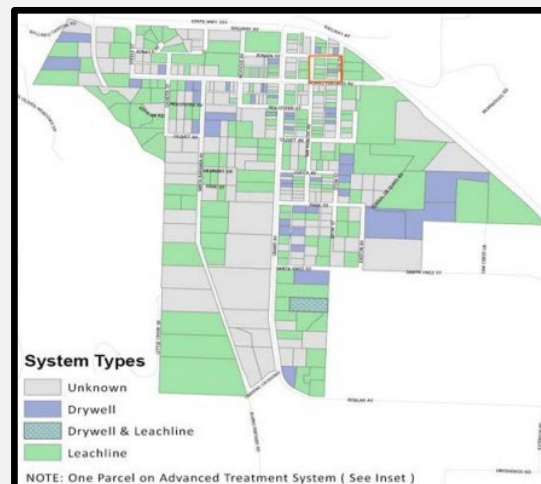
Annexation of inner - rural and rural area(s) to a sanitary district or extensions of sewer lines into inner - rural and rural area(s) as defined on the land use plan maps shall not be permitted unless required to prevent adverse impacts on an environmentally sensitive habitat or to protect public health



# WHAT HAPPENED PRIOR TO FORMATION?

## 2010 LOS OLIVOS WASTEWATER MANAGEMENT PLAN [WEBSITE LINK](#)

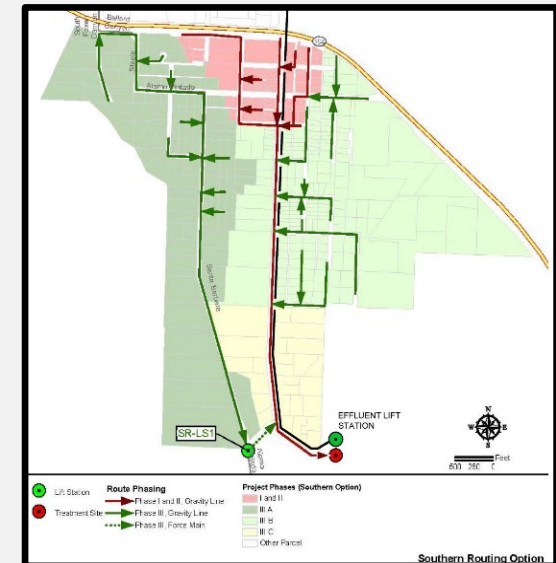
- Discussion about gravity versus septic tank effluent pumping (STEP) collection, membrane bioreactor (MBR) treatment, and advanced on-site systems
- Provides details on systems, types, percolation
- Groundwater quality issue discussion begins on page 28



# WHAT HAPPENED PRIOR TO FORMATION?

## 2016 UPDATED PRELIMINARY ENGINEERING REPORT [WEBSITE LINK](#)

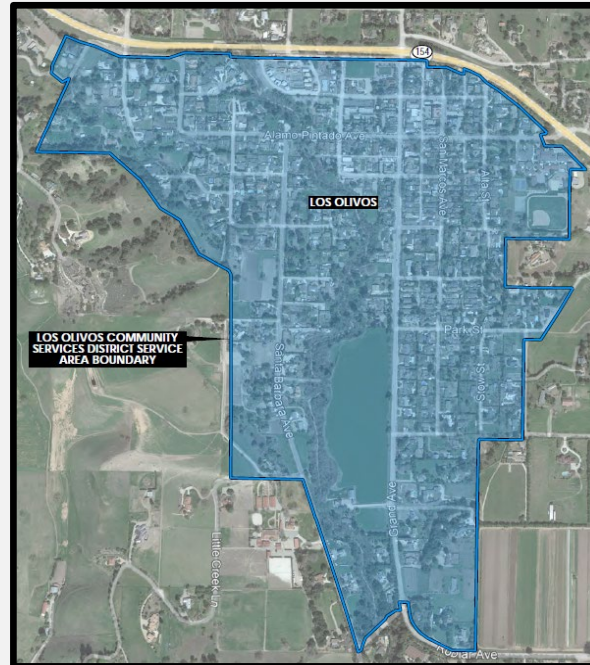
- Detailed discussion about collection, treatment, disposal, and advanced on-site approaches
- Provided early design and associated costs
- Rather than following the tiered approach, analyzed a system that serves the entire SPA
- Focused on MBR treatment
- Evaluated two effluent disposal methods: infiltration and nonpotable reuse
- Analyzed “no action alternative”





# 2018 FORMATION

The District shall be authorized to collect, treat, and dispose of sewage, wastewater, recycled water, and storm water, in the same manner as a sanitary district, formed pursuant to the Sanitary District Act of 1923, Division 6 (commencing with Section 6400) of the Health and Safety Code. (Reference: Government Code sections 61011(a)(1), 61100(b))



## SINCE FORMATION GRANT FUNDING

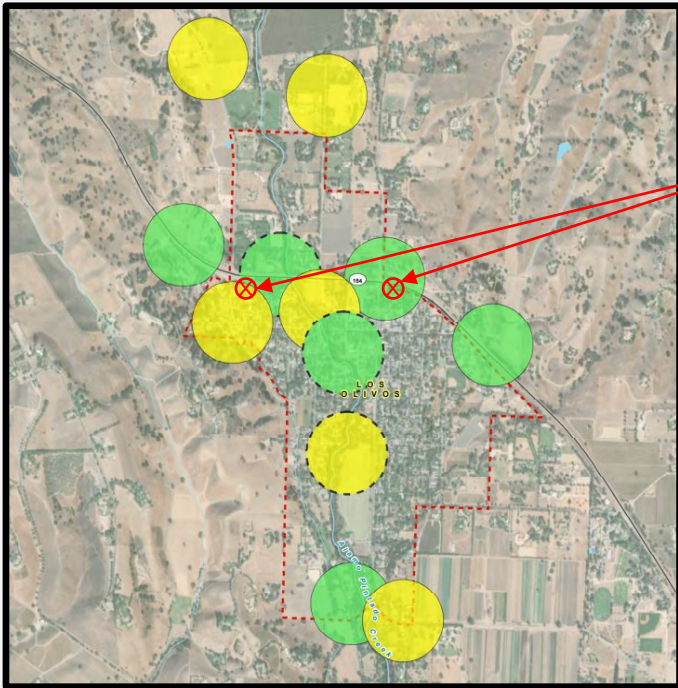
Year	Amount	Source	Activities
2020	\$30,000	County EHS	Loading Study, Groundwater Monitoring Plan planning
2020	\$120,000	County EHS	Groundwater Monitoring Plan, Preliminary Engineering Report
2020	\$150,000	State Waterboard	Water recycling, effluent disposal
2021	\$30,000	County EHS	Preliminary Engineering Report Update
	<b>\$330,000</b>	<b>TOTAL</b>	



# SINCE FORMATION

## 2021 LOS OLIVOS GROUNDWATER MONITORING PLAN [WEBSITE LINK](#)

- Identified 12 shallow groundwater monitoring areas
- Prioritized into two groups



November 2022  
Groundwater Monitoring Well

**LEGEND**

- Proposed New Monitoring Well Zone
  - Phase 1 (Green circle)
  - Phase 2 (Yellow circle)
- Nested Monitoring Well (Dashed circle)
- All Other Features
  - Los Olivos Special Problem Area (Red dashed line)

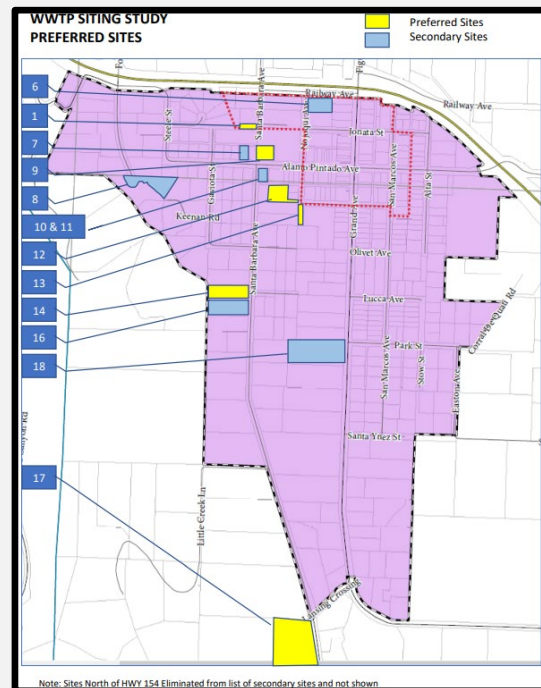


# SINCE FORMATION

## 2021 SITING STUDY

[WEBSITE LINK](#)

- Examined 18 potential sites
- 3 groupings: preferred, secondary, north of I 54



# HOW MUCH EFFLUENT (SEWAGE)?

[WEBSITE LINK](#)

## Design Flows

	Existing Flows (Calculated)	Proposed 20 -Year Buildout Design Flows	ADUs	Proposed 20 -Year Buildout Design Flows with ADUs
	Average Daily Flows - gal ( <b>Maximum Daily Flows - gal</b> )	Average Daily Flows - gal ( <b>Maximum Daily Flows - gal</b> )	Average Daily Flows - gal ( <b>Maximum Daily Flows - gal</b> )	Average Daily Flows - gal ( <b>Maximum Daily Flows - gal</b> )
Zone 1 – Commercial & Residential Lots	27,800 ( <b>89,000</b> )	43,800 ( <b>140,000</b> )		43,800 ( <b>140,000</b> )
Zone 2 – Near to Downtown Residential	10,500 ( <b>33,700</b> )	10,800 ( <b>34,400</b> )		10,800 ( <b>34,400</b> )
Zone 3 – Remaining Residential	58,000 ( <b>185,800</b> )	63,300 ( <b>202,400</b> )	2,600 ( <b>8,300</b> )	65,800 ( <b>210,700</b> )
Total	96,400 ( <b>308,500</b> )	117,800 ( <b>376,800</b> )	2,600 ( <b>8,300</b> )	120,300 ( <b>385,000</b> )

Note: Flows from the Basis of Design Report by Stantec dated January 7, 2022



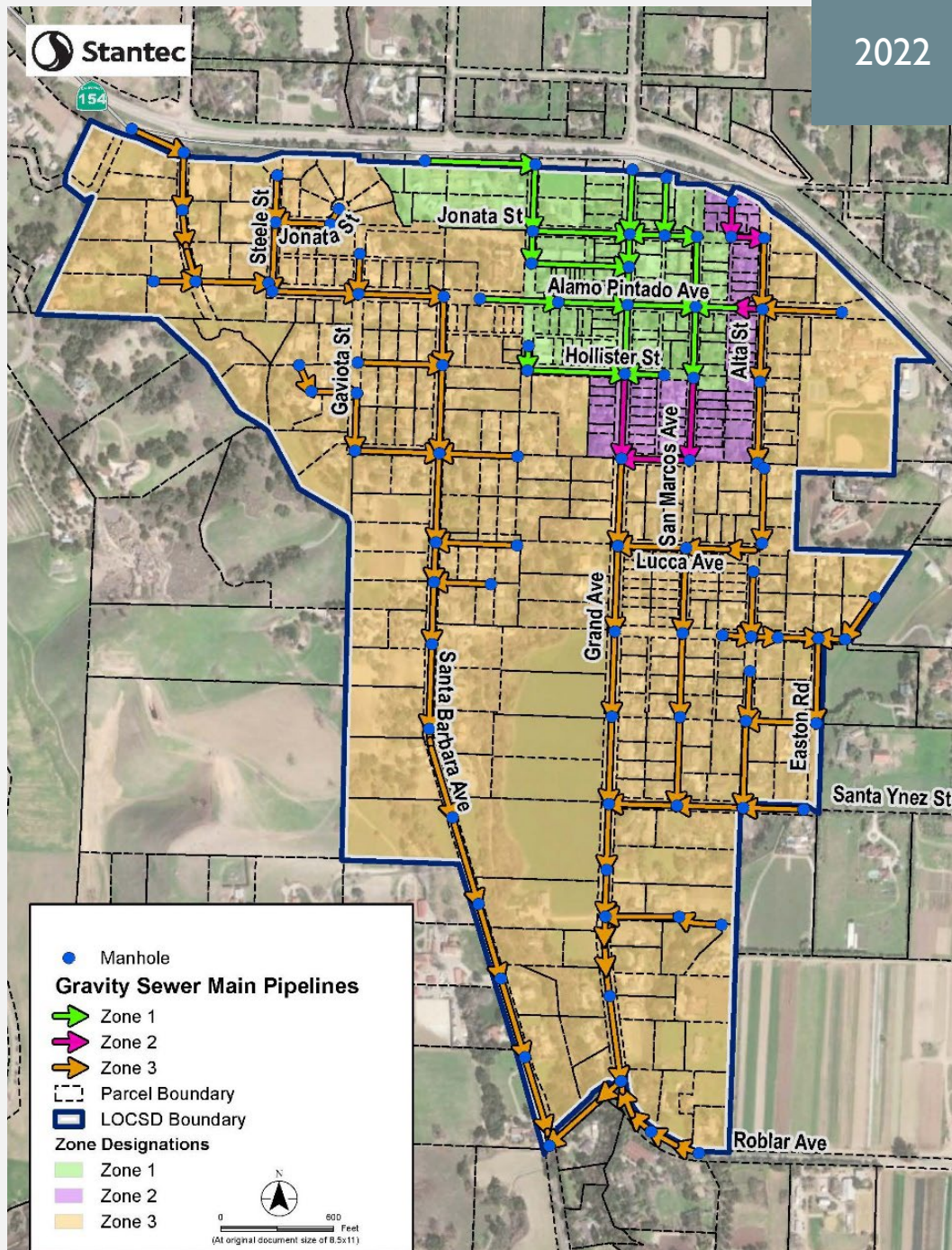
# 30% DESIGN

[WEBSITE LINK](#)

## Gravity Collection, MBR Treatment



Zones 1 and 2



# SEPTIC TANK EFFLUENT PUMPING (STEP)

[WEBSITE LINK](#)

- STEP collection, coupled with membrane bioreactor (MBR) treatment



# COMMUNITY ADVANCED TREATMENT

[WEBSITE LINK](#)

## AdvanTex Treatment

- Likely in the range of 20% to 50% more expensive than MBR
- Can be decentralized to more than one location
- Quicker to design and construct
- Larger footprint



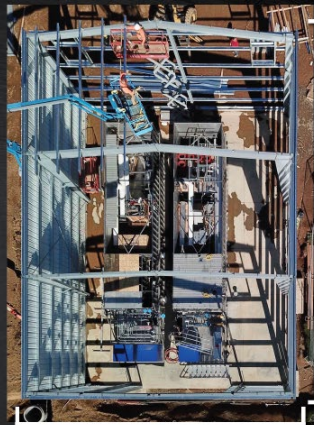


# MEMBRANE BIOREACTOR (MBR) TREATMENT

[WEBSITE LINK](#)



## PARKDALE SANITARY DISTRICT



65 FEET

45 FEET

Images from



For more information, visit:

<https://www.cloacina.com/>



# EFFLUENT DISPOSAL STUDY

[COMING SOON: WEBSITE LINK](#)

- Examine five options and make a recommendation
  1. Percolation ponds
  2. Percolation chambers
  3. Shallow aquifer injection well(s)
  4. Alamo Pintado Creek outfall
  5. Disposal by sale for reclaimed water use
- Report to be provided at December 14 meeting



# OPTIONS



# COLLECTION

- Gravity
- STEP
- Advanced On-Site



## TREATMENT

- Membrane Bioreactor (MBR)
- Passive
- Advanced On-Site



## DISPOSAL

- Percolation ponds
- Percolation chambers
- Shallow aquifer injection well(s)
- Alamo Pintado Creek outfall
- Disposal by sale for reclaimed water use
  
- Advanced On-Site



# SITING

- For shared infrastructure – 18 initial sites identified



## PHASING

- Everyone seems to agree we must focus on downtown core first
- When and how residential parcels are phased could change depending on future discussions and decisions

