Want more?

Coffee with a Director

1st and 3rd Friday

9:00 (ish)

Lefty's Coffee Co.

2896 San Marcos

STATE OF THE DISTRICT
DECEMBER 2024

Guy Savage
General Manager

Board of Directors

Julie Kennedy

Tom Fayram

Tom Nelson

Lisa Palmer

Greg Parks

AGENDA

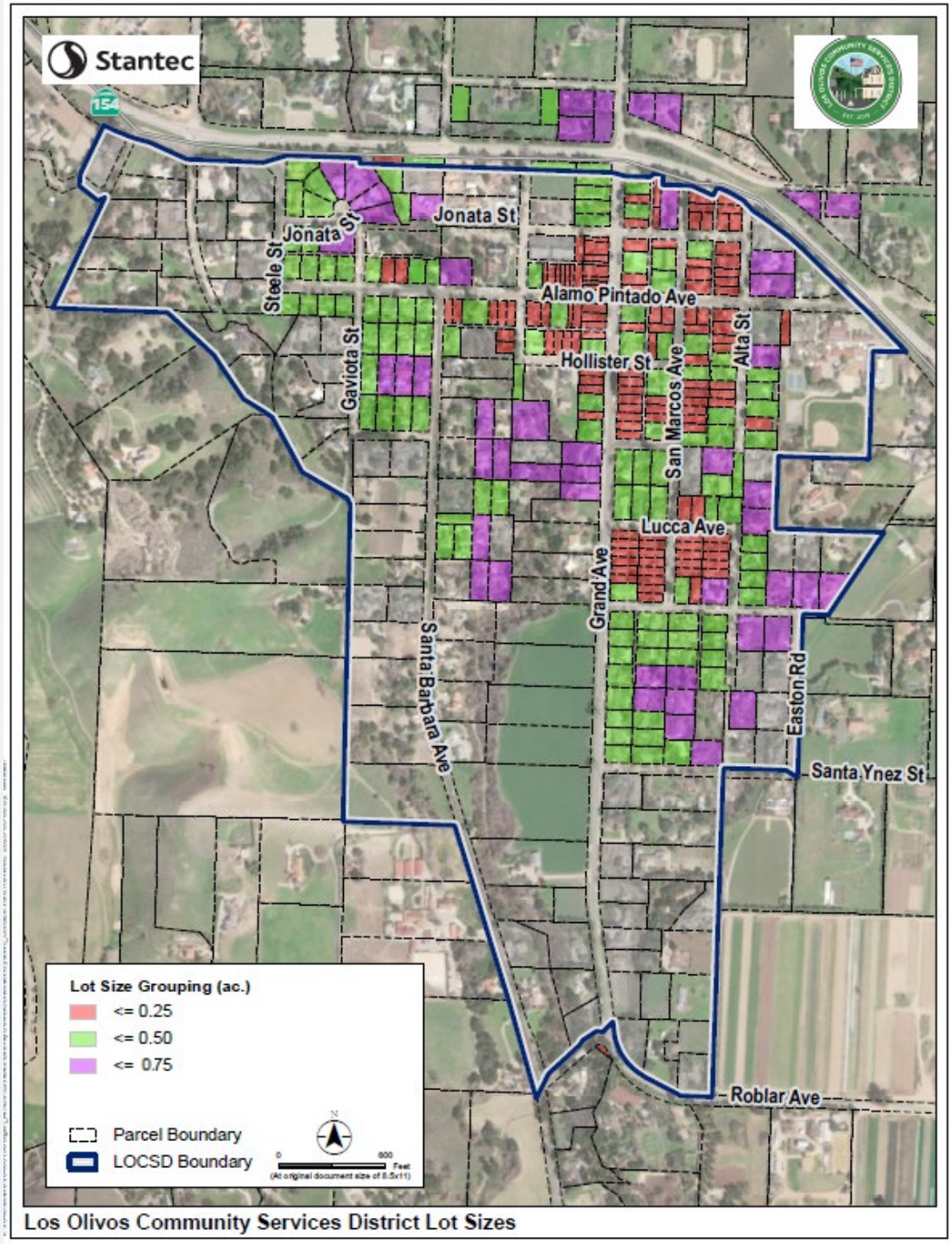
- What do you want to know?
- LOCSD overview
- What's happened
- What's next
- More Q & A

WHAT DO YOU WANT TO KNOW?

WHAT ARE YOUR QUESTIONS?

LOS OLIVOS COMMUNITY SERVICES DISTRICT

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



THE DISTRICT

372 Parcels
~40 Commercial
~332 Residential

Annual Budget
(FY 2024-25) $243,039

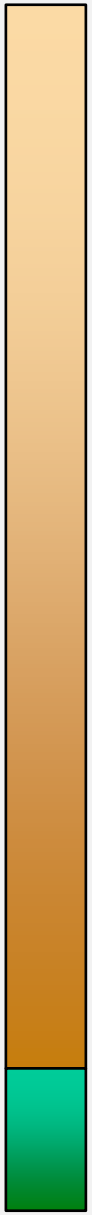
WASTEWATER PROCESS SIMPLIFIED

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

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

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

HISTORY ~ SPECIAL PROBLEMS AREA



1974 – Special Problems Area designation

2003 – County Septic to Sewer Study

2010 – Los Olivos WWMP

2013 – Draft Eng. Report ($11.2M)

2016 – Prelim Eng. Report ($20.9M)

2018 - LOCSD formed

2022 - 2 initial wells

2024 - 3 more wells

2021 - 30% Design Gravity / MBR
$47.8M

2022 - Disposal Study

2024
30% Effluent/Hybrid Design
30% Construction Estimates
$46.7-$53.0M

2024 KEY ACTIVITIES COMPLETED OR STARTED

- ✓ Community workshops
- ✓ 3 additional groundwater monitoring wells
  - ✓ Split sampling, additional sampling and testing – all 5 wells
- ✓ REGEN – 30% effluent/hybrid collection design
- ✓ Updates to collection, treatment, and disposal costs

Exploration of City of Solvang connection

- ✓ WSC and Carollo reports
- ✓ Stantec contract – bridge to Sunny Field Park
- ❑ Stantec report (early 2025)

Not an exhaustive list

2023 COMMUNITY WORKSHOP RESULTS

1. Construction (capital) cost
2. Operations and maintenance cost
3. Ownership / maintenance responsibility
4. Treatment plant location
5. Growth inducement
6. Odors
7. Treatment plant footprint / size
8. Viewshed impact
9. Innovation
10. Other

MORE 2023 COMMUNITY WORKSHOP RESULTS

Disposal

1. Percolation Chambers
2. Percolation Ponds
3. Injection wells
4. Creek disposal

- Reuse with above

2024 COMMUNITY WORKSHOP

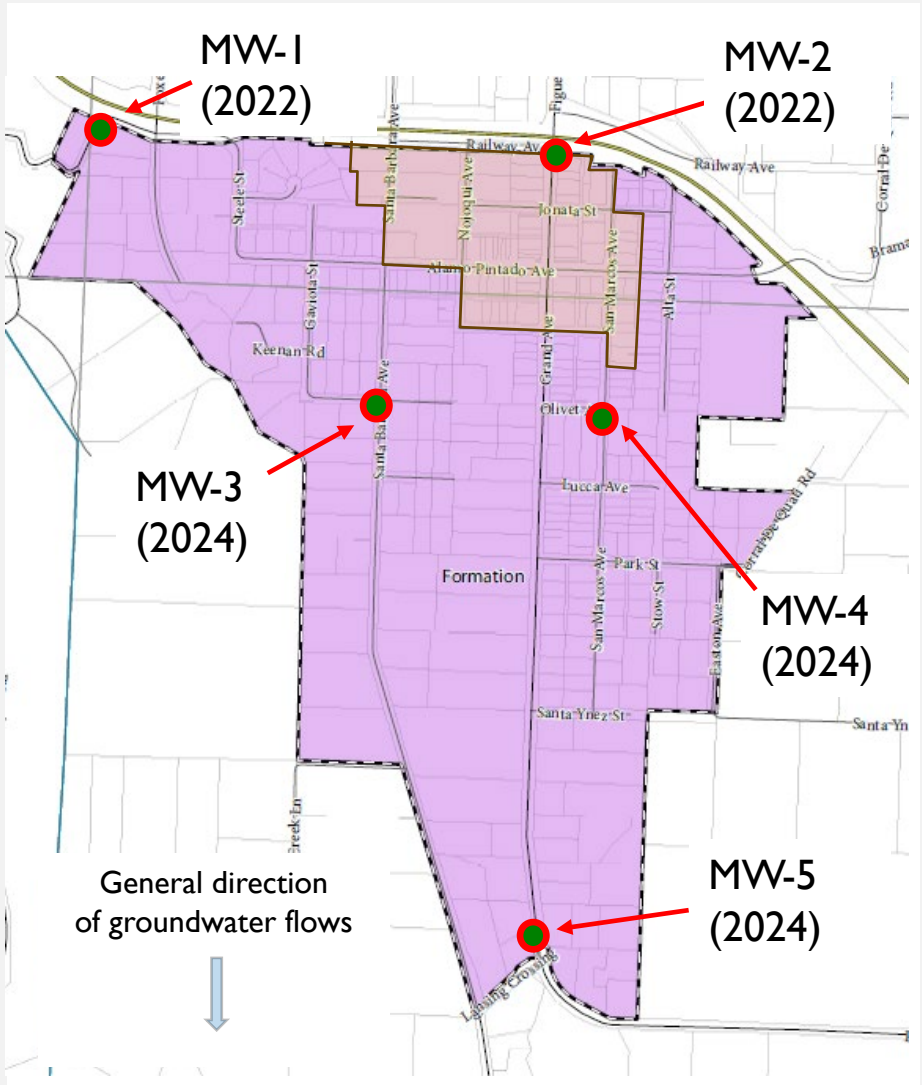
- REGEN presentation on Effluent / Hybrid collection
- Stantec presentation on Gravity Fed collection
- For those in attendance, heavy leaning towards Gravity Fed collection over Effluent / Hybrid
- Conflict with 2023 Workshop Results??

1. Construction (capital) cost
2. Operations and maintenance cost
3. Ownership / maintenance responsibility

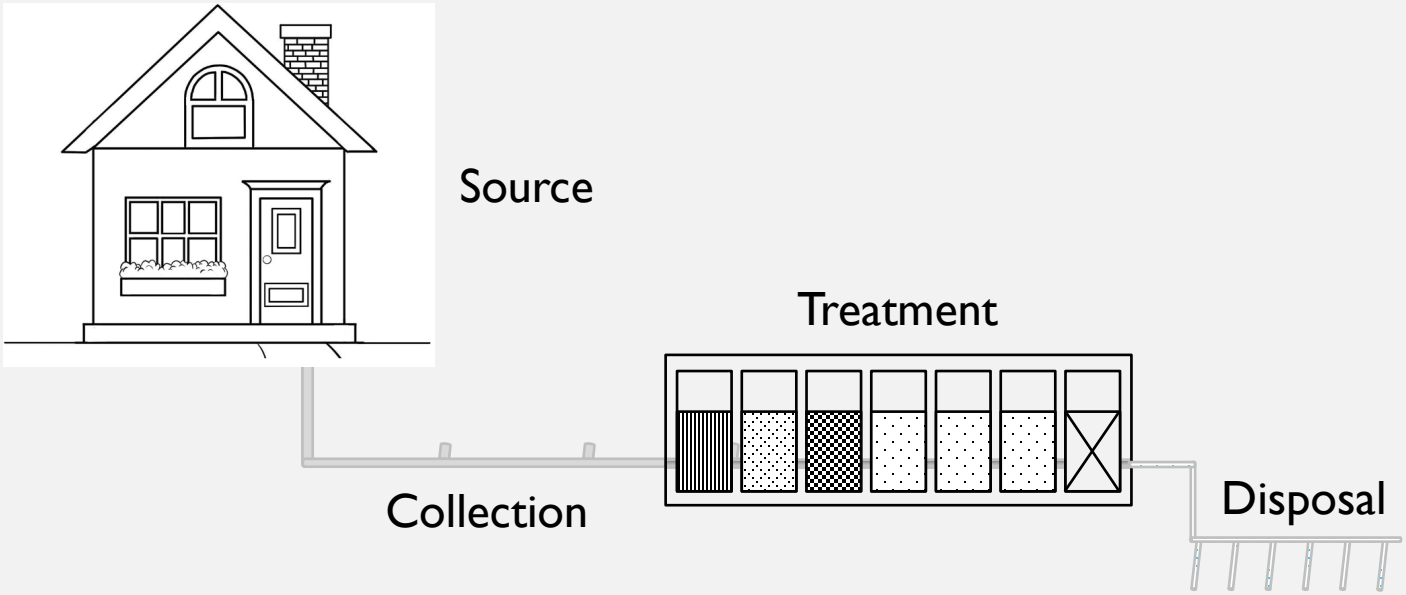
SHALLOW GROUNDWATER MONITORING WELLS

Nitrate Concentrations				
Well	**Nov 2022**	**March 2024**	**May 2024**	**Nov 2024**
MW-1	2.6	2.5	2.2	2.5
MW-2	10	11	9.9	12
MW-3		6.3	6.1	6.2
MW-4		11	14	13
MW-5		4.5	4.7	4.9
Maximum Contaminate Level (MCL) allowed is 10				

Well Depths (below ground surface)				
Well	**Nov 2022**	**March 2024**	**May 2024**	**Nov 2024**
MW-1			26.08	26.78
MW-2			31.89	27.13
MW-3			17.73	14.05
MW-4			20.72	17
MW-5			10.08	8.08

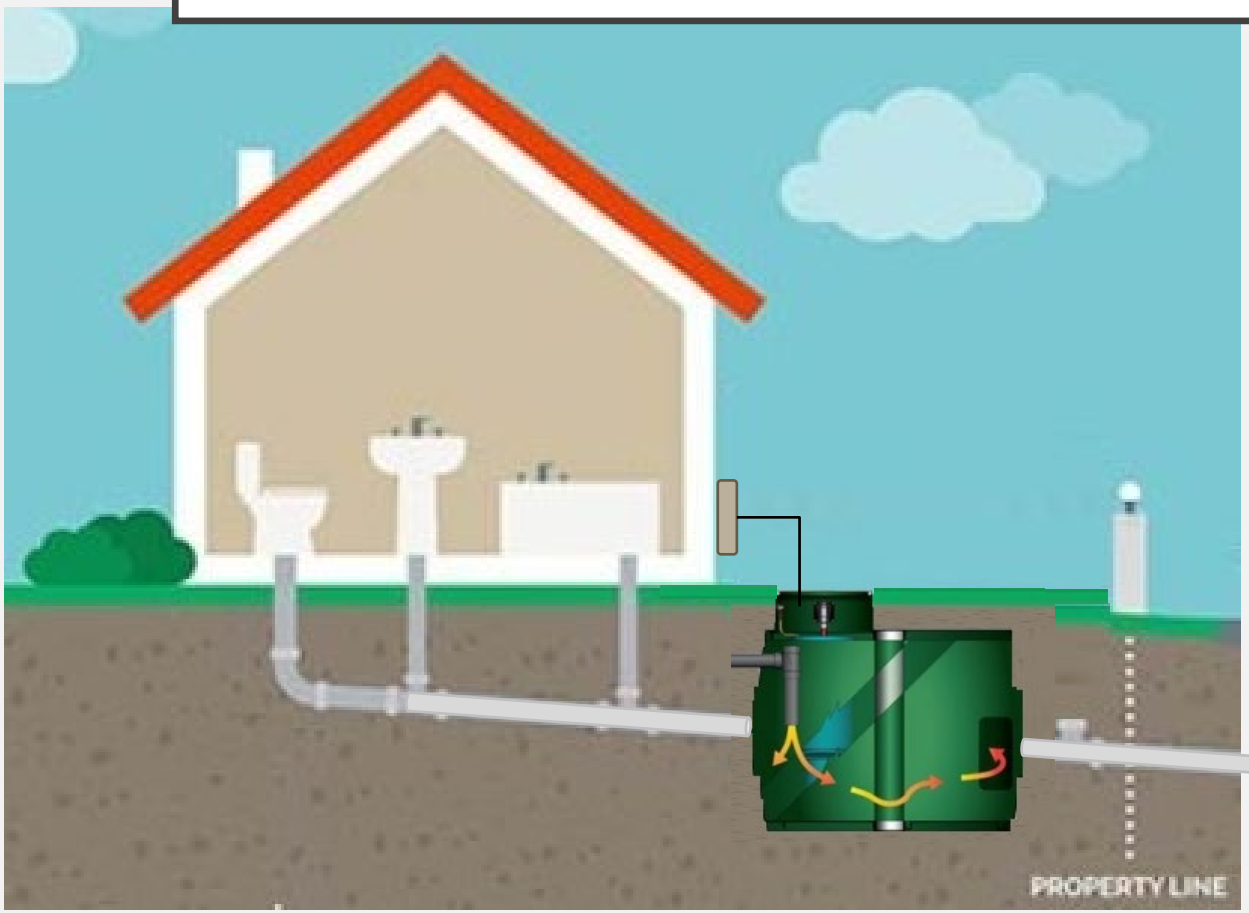


WASTEWATER PROCESS SIMPLIFIED



LOOKING AT COLLECTION MORE CLOSELY

EFFLUENT COLLECTION



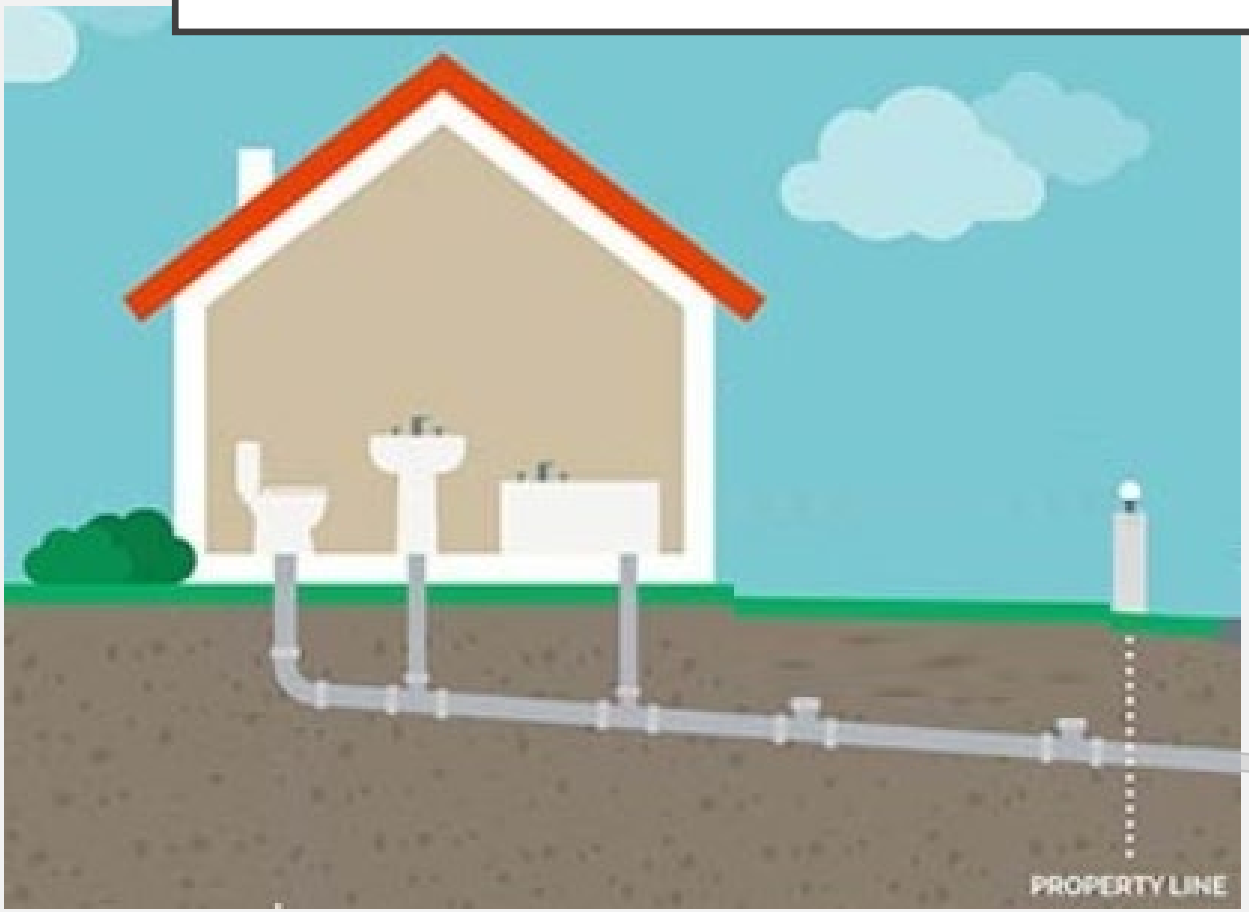
Treatment Plant

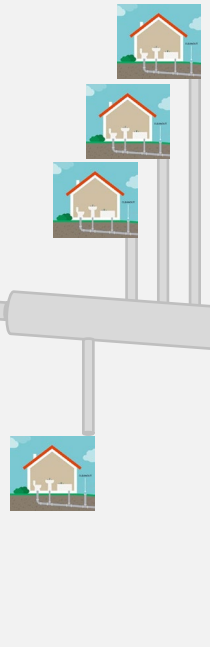
To disposal

Pressurized Pipes

Images for illustration purposes only, not to scale

GRAVITY FED COLLECTION





Treatment Plant

To disposal

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HYBRID COLLECTION

Images for illustration purposes only, not to scale

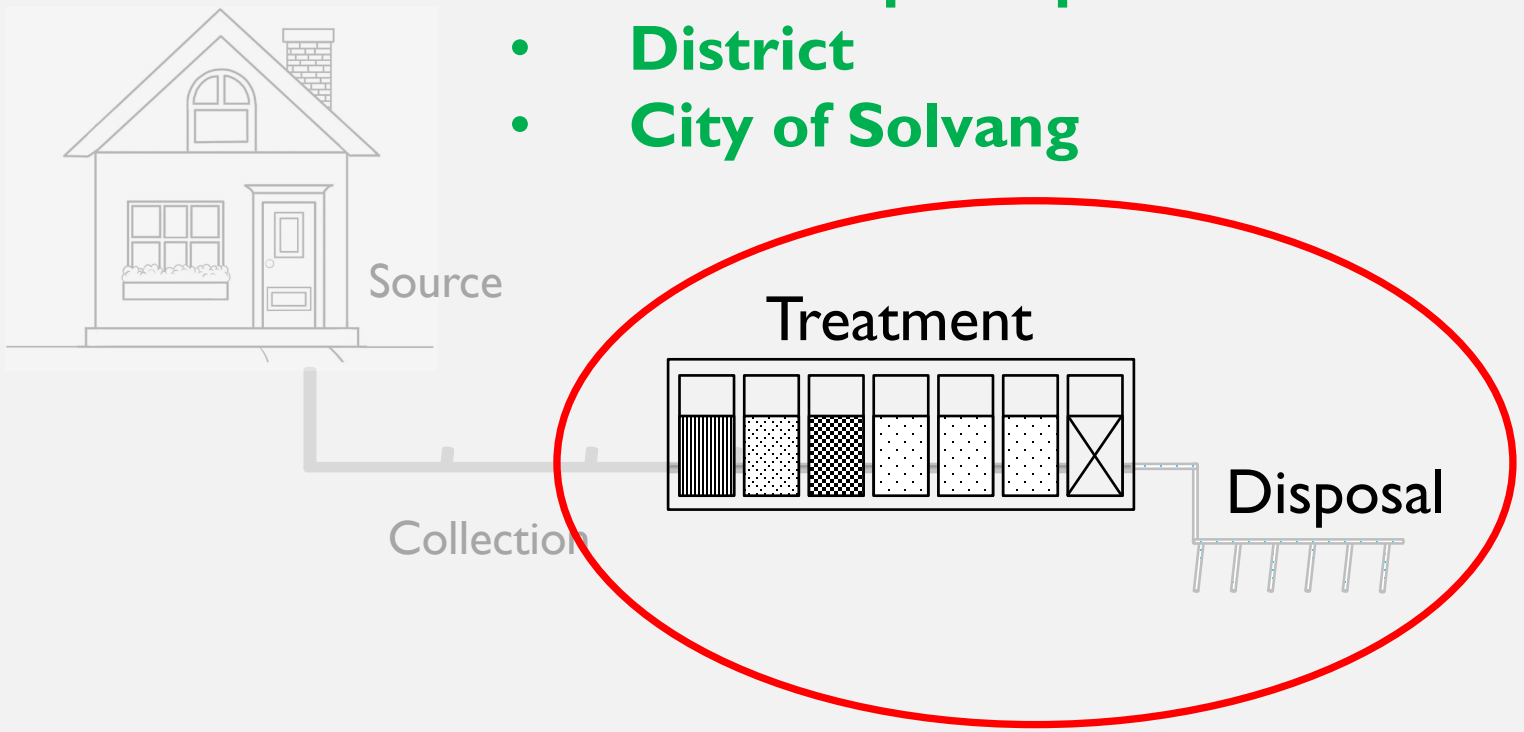
IN DISTRICT COLLECTION COSTS

Approach	Total
Effluent Collection REGEN Option B - entire District	$ 21,637,095
Hybrid Collection REGEN Option A - Commercial / nearby lots gravity	$ 25,530,016
Gravity Collection South end of District treatment	$ 27,938,000

TREATMENT AND DISPOSAL

Treatment / Disposal possibilities:

- **District**
- **City of Solvang**



IN DISTRICT TREATMENT AND DISPOSAL

Item	Estimate
Treatment – 1.5 acre site, Cloacina MBR plant, offices, parking, etc.	$19,900,000
Disposal - 4 acre site, percolation chambers	$ 5,200,000
Total	**$25,100,000**

CAPITAL COSTS
LOCAL OPTION

	Effluent Collection	Hybrid Collection	Gravity Fed Collection
Collection	$ 21,637,095	$ 25,530,016	$ 27,938,000
Treatment	$ 19,900,000	$ 19,900,000	$ 19,900,000
Disposal	$ 5,200,000	$ 5,200,000	$ 5,200,000
Total	$ 46,737,095	$ 50,630,016	$ 53,038,000

CITY OF SOLVANG TREATMENT AND DISPOSAL

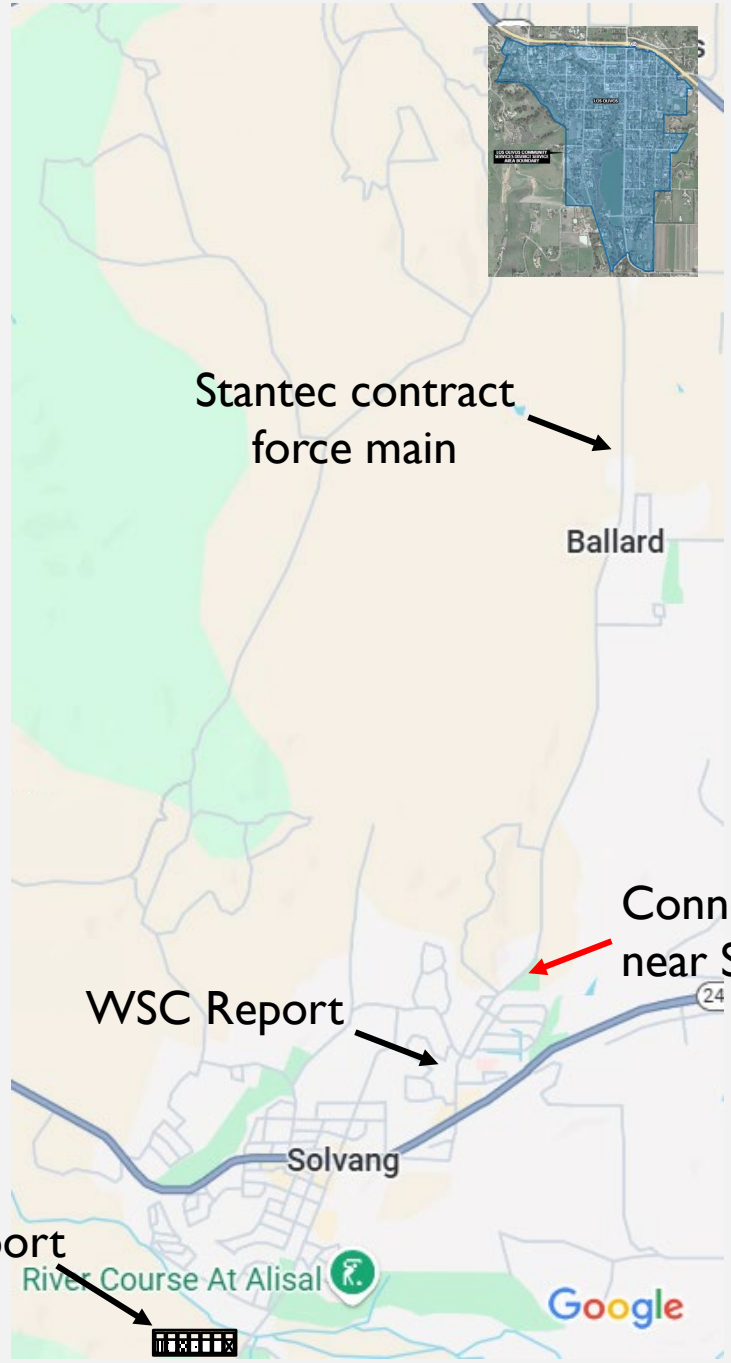
Source

District Boundary

City of Solvang Treatment (WWTP)

City of Solvang Disposal

LOCSD TO CITY OF SOLVANG COLLECTION



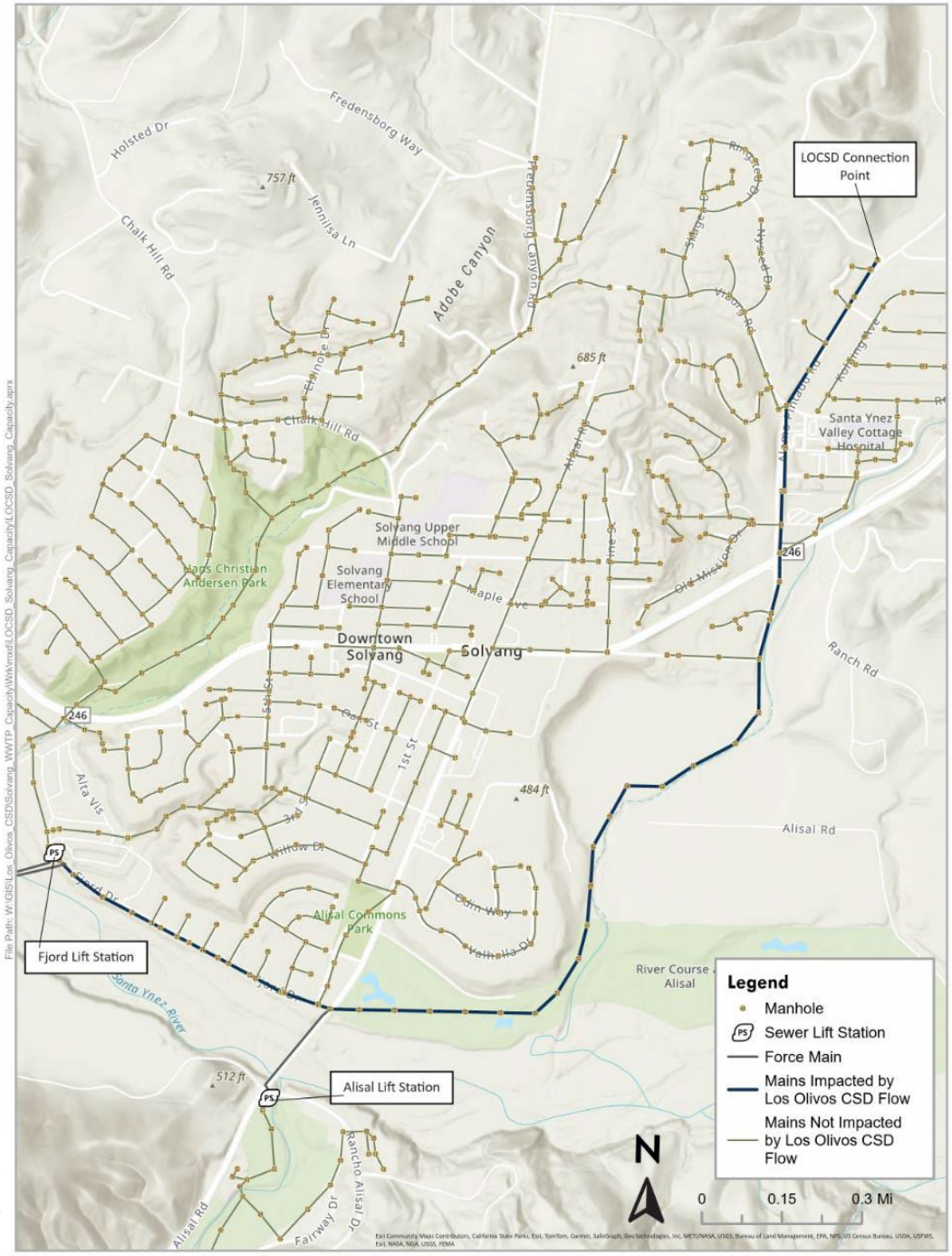
POTENTIAL CONNECTION TO CITY OF SOLVANG INFRASTRUCTURE AND WWTP

- WSC and Carollo evaluated existing City of Solvang infrastructure and WWTP
- Examined engineering feasibility and related costs

- Just because something is feasible from an engineering perspective, does not mean the LOCSD has agreement with the City of Solvang

WSC - CONNECTION TO WWTP

- Examine existing infrastructure (pipes, lift stations, etc.) to determine capacity
  - Sunny Field Park to WWTP lift station
- Estimate costs where existing infrastructure insufficient
- Hydraulic modeling for dry and wet weather flows


LOCSD Connection Point
Fjord Lift Station
Alisal Lift Station
Legend
Manhole
Sewer Lift Station
Force Main
Mains Impacted by Los Olivos CSD Flow
Mains Not Impacted by Los Olivos CSD Flow
N
0
0.15
0.3 Mi
Downtown Solvang
Solvang
Solvang Upper Middle School
Solvang Elementary School
Hans Christian Andersen Park
Alisal Commons Park
Santa Ynez Valley Cottage Hospital
Adobe Canyon
Fredensborg Canyon Rd
Fredensborg Way
Holsted Dr
Chalk Hill Rd
Jennilsa Ln
Ranch Rd
Alisal Rd
Santa Ynez River
685 ft
757 ft
484 ft
512 ft
246
PS

CONNECTION TO WWTP

- WSC identified nine projects
  - Four projects related to sewer mains
  - Five projects related to sewer lift stations
  - Projects not all immediate, some targeted to start 2033
- LOCSD to have a share of $3,548,630

CAROLLO CONTRACT FEASIBILITY AT WWTP

- Evaluate LOCSD loads and flows on City of Solvang WWTP
- Included look at source drinking water (ID1)

Source	Constituent	ADMMF Flow (gpd)	Avg. Influent Wastewater Concentration (mg/L)	WWTP Influent Load (lb/day)
City of Solvang Wastewater(1)	BOD_5	713,000	263	2,018
	TSS		201	1,542
	TKN		59	453
LOCSD Phase III Wastewater(2)	BOD_5	133,800	416	451
	TSS		320	347
	TKN		63	68
SYCSD Wastewater(3)	BOD_5	300,000	320	658
	TSS		176	503
	TKN		63	148

Notes:
Abbreviations: gpd = gallons per day; lb/day = pounds per day; mg/L = milligrams per liter; avg = average
(1) WWTP average influent concentrations provided by City of Solvang.
(2) LOCSD estimated wastewater concentrations from 2022 Stantec BODR.
(3) SYCSD wastewater concentrations from 2017 Recycled Water Facilities Plan.

biological oxygen demand (BOD), total suspended solids (TSS), total kjedahl nitrogen (TKN)

CITY OF SOLVANG WWTP

- City of Solvang WWTP is rated to treat 1.5 mgd of influent wastewater flow
- WWTP struggles to meet the effluent limits at current flows due to process limitations (Phase 2 project is intended to address)
- Highly unlikely that the WWTP in its current state would continue to meet permit limits with higher flows from LOCSD

Table 4 Solvang WWTP Effluent Concentrations

Constituent	WWTP Effluent Permit Limit (mg/L)	Modelled Effluent Concentration (mg/L)
BOD_5(1)	30	2.4
TSS(1)	20	4.2
TN(2)	10	8.8

Notes:
Abbreviations: mg/L = milligrams per liter
(1) 30-day average effluent permit limit provided.
(2) 25-month rolling median effluent permit limit provided.

CONCLUSION: TECHNICALLY FEASIBLE

Post WWTP Phase 2 Upgrades:

- WWTP can effectively meet effluent permit limits while accepting full Phase 3 buildout ADMMF from LOCSD
- Addition of LOCSD wastewater will not affect the ability of the WWTP to meet its effluent permit limits, and the flow rate will not cause the WWTP to exceed its rated capacity
- Carollo does not foresee the background concentrations of TDS, sodium, or chloride in the LOCSD's drinking water (ID1) as negatively affecting the WWTP's ability to meet permit limits for these constituents

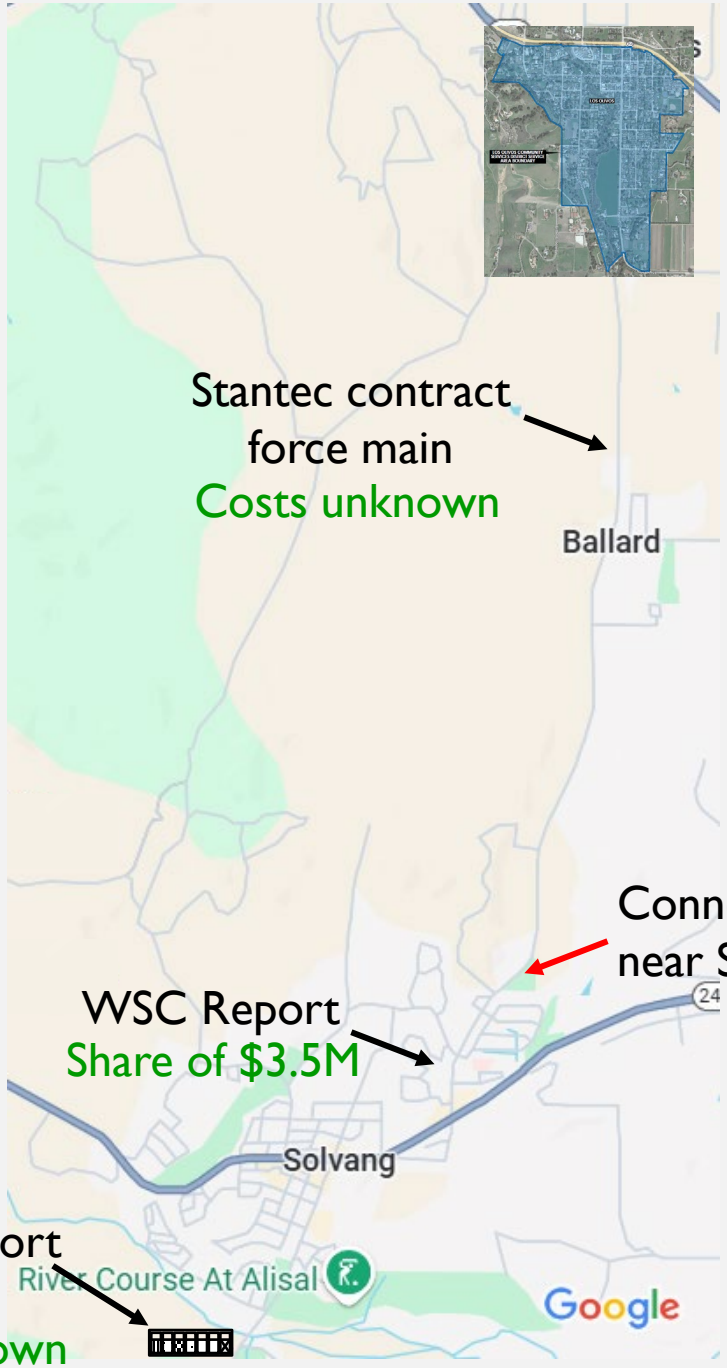
- Phase 2 Upgrades Project is currently entering the preliminary design phase and construction is anticipated to be completed in April 2028

carollo

LOS OLIVOS COMMUNITY SERVICES DISTRICT EST. 2018

SUMMARY:

LOCSD TO CITY OF SOLVANG COLLECTION



In District collection
$21.6-27.9M

WHAT'S NEXT?

Complete construction cost models

LOCSD-Sunny Field Park force main

City of Solvang discussions

Operations cost models and pros/cons

WHAT'S NEXT?

- Effluent, Gravity, or Hybrid?
- Local or City of Solvang?

QUESTIONS AND ANSWERS?

THANK YOU

Guy Savage

General Manager

PROPOSITION 218
THE RIGHT TO VOTE ON TAXES ACT

- Intent is to ensure that all taxes and most charges on property owners are subject to voter approval
- **Way** over simplified – Property owner protest vote based on calculated benefit

- District presentation on August 14, 2024
- For more details, visit:

  https://lao.ca.gov/1996/120196_prop_218/understanding_prop218_1296.html

2023 EHS / CCRWQCB WORKSHOP

Residential Onsite Wastewater Treatment Systems (OWTS) – aka advanced onsite systems

- Capital / Construction = $30,000 - $70,000
  - Depending on site conditions and the components required, some estimates over $100,000
- Annual Maintenance = $1,505 - $1,905 ($125 - $160/mo)
  - Permits, pumping, service contract, testing
  - Not including electrical/communication costs, or repairs to treatment system

Public water main setback for tanks = 25 feet

SANTA YNEZ CSD
FACTS, FIGURES, AND INFO

- New connection - $75,000-$100,000
- Monthly - single family home (215 gpd) - $86.87
- Agreement with the City of Solvang

  https://sycsd.specialdistrict.org/files/bae5dff28/CityofSolvangContract.pdf