



WASTEWATER TREATMENT AND RECLAMATION

COMMUNITY SOLUTION WORKSHOP

TUESDAY, JANUARY 24, 2023



WELCOME!

GEOFF GREEN – FACILITATOR
GUY SAVAGE – GENERAL MANAGER



AGENDA AND GOALS FOR THIS EVENING

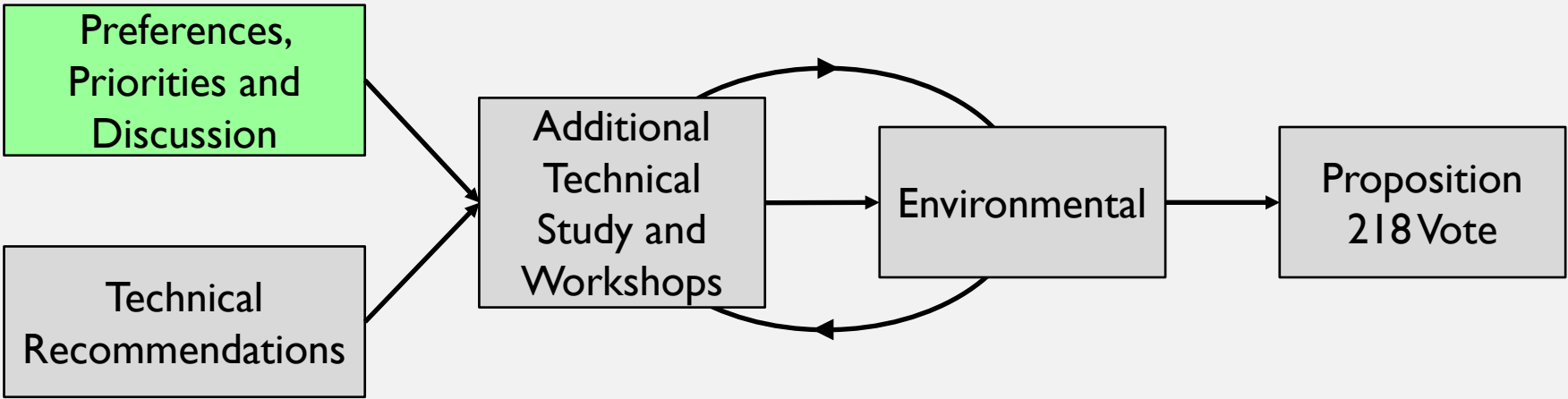
- Share Information About Potential Solutions
- Answer Questions
- Get Input from Property Owners
- Discuss Next Steps (may table some topics for future workshops or discussion)
- Input will be used by the Board to craft a specific solution or solutions that will ultimately go to a property owner vote for approval



GROUND RULES



TIMELINE



Presentation of findings, discussion, search for funding

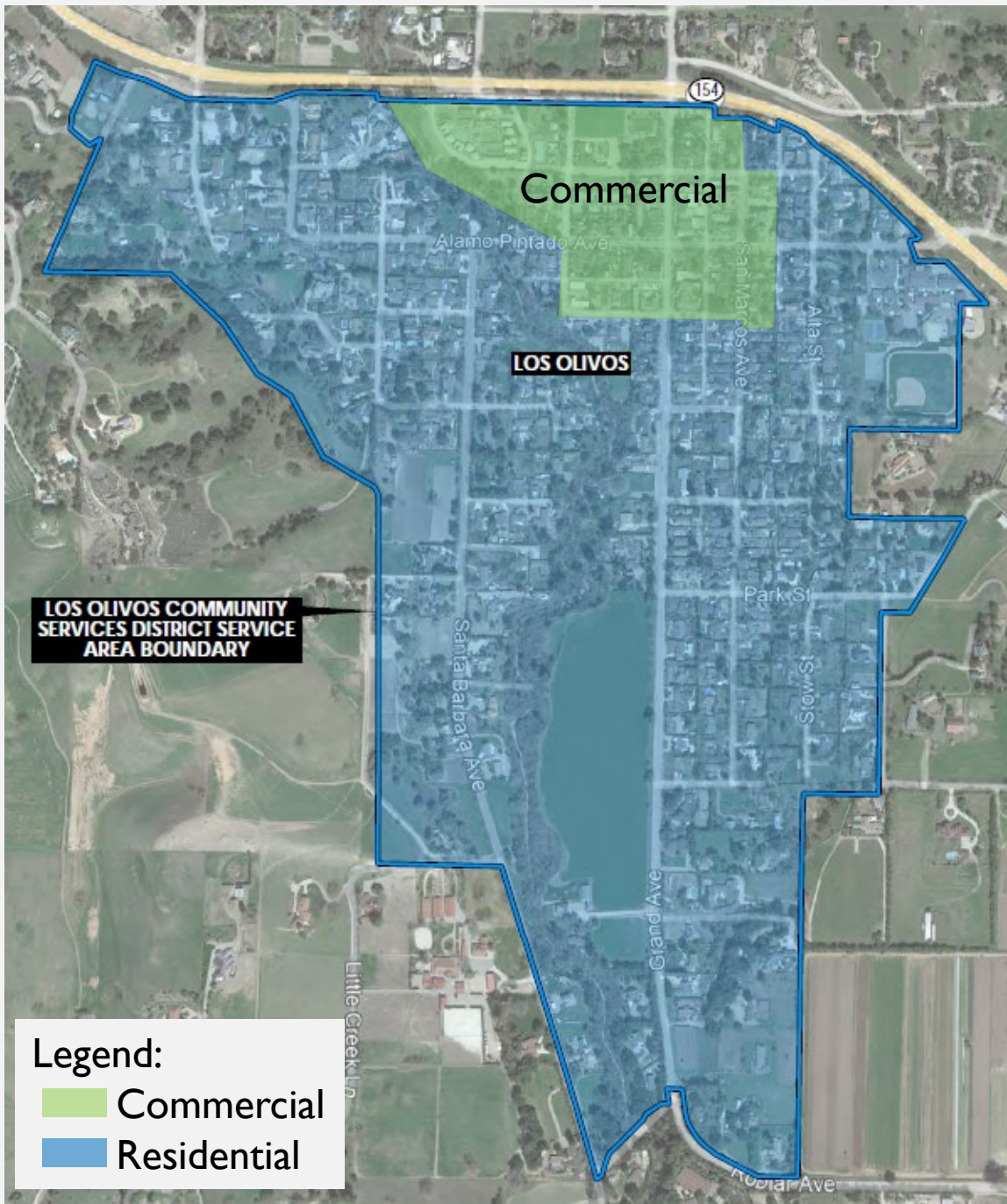




LOS OLIVOS COMMUNITY SERVICES DISTRICT

- 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, regulatory agencies could build a sewer or require connection to another facility
 - ➔ Doing nothing is not a long-term option





EVERYONE IS
PART OF THE
SOLUTION

Solution could be
phased



REGULATORY AGENCIES

Central Coast Regional Water Quality Control Board

- Develops and enforces water quality objectives and implements plans that will best protect the area's waters
- Has direct regulatory authority over individual septic and community wastewater systems
- Will not mandate wastewater solution
- Looking for a community wastewater reclamation system (supports local control)



REGULATORY AGENCIES

Santa Barbara County - Environmental Health Services

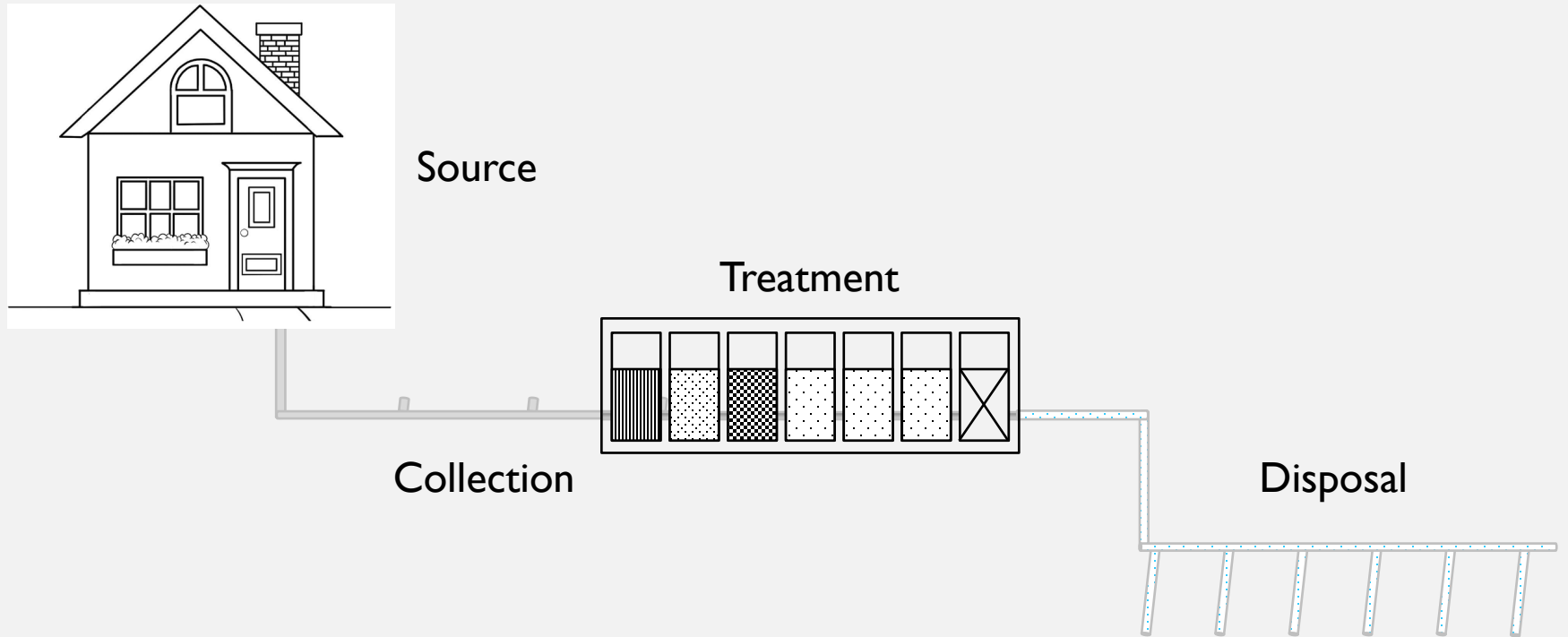
- Oversight via Local Agency Management Plan (LAMP)
- Will not mandate wastewater solution
- Looking for a community wastewater reclamation system



COUNTY *of* SANTA BARBARA
PUBLIC HEALTH



WASTEWATER PROCESS SIMPLIFIED



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)

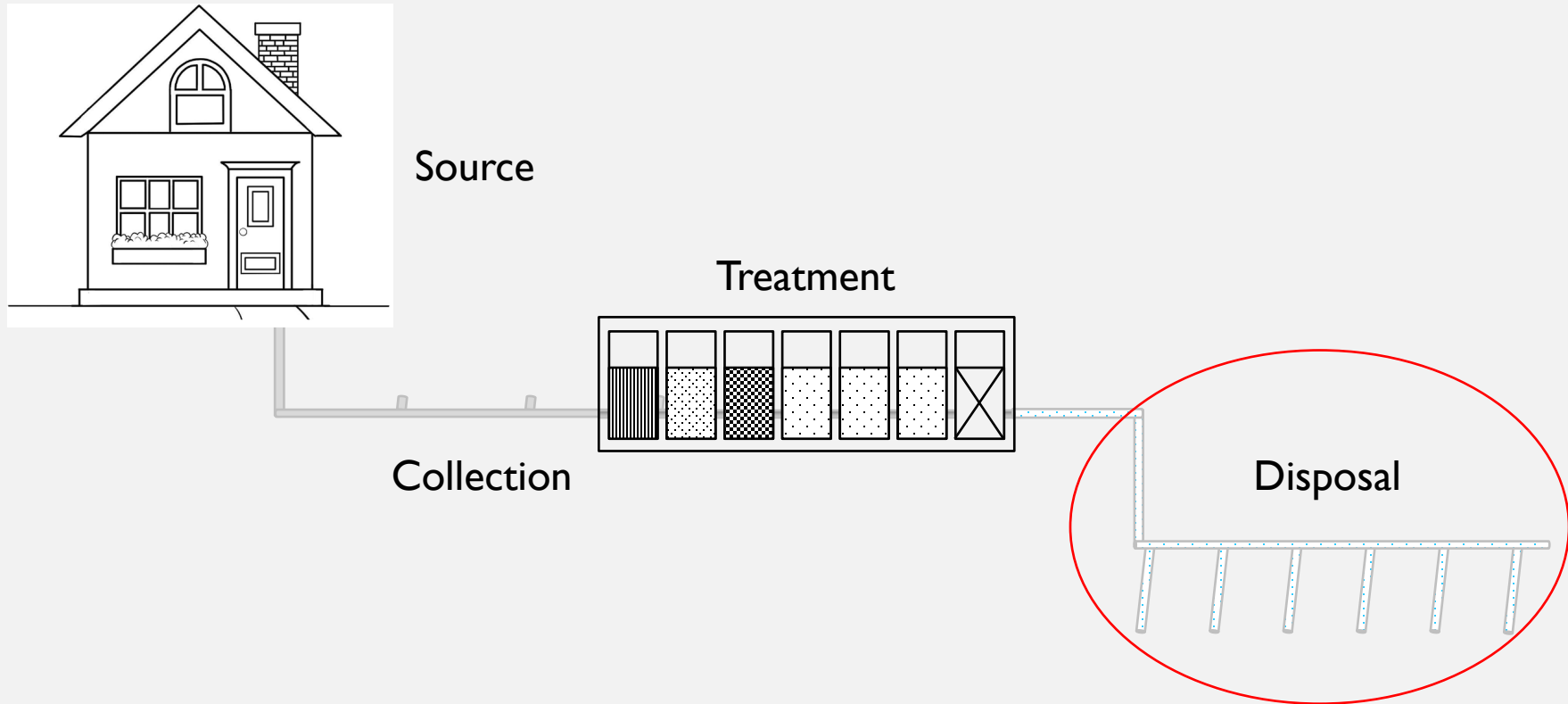


WHAT CONSIDERATIONS ARE MOST IMPORTANT TO YOU?

- Cost (capital / operations & maintenance)
- Location
- Ownership / maintenance responsibility
- Potential for growth inducement
- Treatment plant footprint / size
- Potential for odor
- Viewshed impacts
- Innovation (newer versus proven tech)
- Other Considerations?



WASTEWATER PROCESS SIMPLIFIED



DISPOSAL

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



DISPERSION OF TREATED EFFLUENT OPTION DESCRIPTIONS

- Percolation Ponds – Open, graded impoundment, dispersion via percolation in soil
- Percolation Chambers – partially or fully buried, dispersion via percolation in soil
- Alamo Pintado Creek Outfall – discharge into Alamo Pintado creek
- Shallow Aquifer Injection Wells - <150 feet deep, inject into saturated portion of the upper aquifer
- Recycle Water – use for landscaping, etc. as needed (cannot accept all of the effluent all of the time)



RANKING OF EFFLUENT DISPERSION CHARACTERISTICS BY HYDROLOGISTS

	Ponds	Chambers	Creek	Injection
Permitting Req.	5	5	2	1
Effluent Quality	5	5	2	1
Social	2	4	3	5
Footprint	2	1	4	5
Water Reclamation	3	3	3	4
Feasibility/Complexity/Reliability	4	3	2	1
Monitoring	4	4	2	1
Capital Cost	5	4	3	1
O&M Cost	4	4	2	1
Total	34	33	23	20

Note: Higher number is better



DISPOSAL BACKGROUND INFO

	Costs		Approval by EHS / RWQCB	Notes
	Capital	Operations & Maintenance (O&M) - annual		
Percolation Ponds	\$ 700,000	minimal	Yes	1.2 acres, with 100% redundancy
Percolation Chambers	\$ 1,154,635	minimal	Yes	3.83 acres, including 100% redundancy
Shallow Aquifer Injection Wells	\$ 900,000	\$3,000,000-4,000,000	Yes	Assumes 3 injection wells, \$300k/well
Alamo Pintado Creek Outfall*	Site specific	\$10,000 +	NPDES req'd	Would require significant increases in water quality prior to placing into outfall
<< reuse >> as additive to one of the above	Site specific	unknown	Yes	

*Creek outfall annual permitting and reporting, \$10,000; plus \$3,000 mandatory minimum fines for violations of permit



NEXT STEPS

- February 15 – Regular Meeting
 - Technical opinion – collection and treatment
 - Finalize next workshop date



WANT MORE???

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



QUESTIONS AND DISCUSSION

U S POST OFFICE
LOS OLIVOS CAL
Ca 93441

