

	Costs					Approval by EHS / RWQCB
	Capital	Operations & Maintenance (O&M) - annual				
		Individual Parcel	Community	Total		
84 372						
<b>Collection</b>						
Gravity Fed	\$ 27,938,000		\$ -	\$ 80,352	\$ 80,352	Yes
Effluent - option b (inc. \$6,685,000 in tanks)	\$ 21,637,095		\$ 118	\$ 60,264	\$ 104,011	Yes
Hybrid (Gravity-downtown&small, effluent) - option a	\$ 25,530,016		\$ 118	\$ 69,304	\$ 106,230	Yes
<b>Data Points (30 year, 5% loan, annual prop tax payment)</b>	<b>Total Capital Cost / Parcel</b>	<b>Annual</b>				
Gravity Fed (all parcels same)	\$ 75,102	\$ 4,886				
Effluent - option b (all parcels same)	\$ 58,164	\$ 3,784				
Hybrid (Gravity-downtown&small, effluent) - option a (all parcels same)	\$ 68,629	\$ 4,464				
<b>Treatment</b>						
Local - MBR	\$ 19,900,000		\$ 1,075	\$300,000-400,000		Yes
City of Solvang connection (includes Disposal)	\$ 9,976,000		\$ 826			Yes
<b>Data Points (30 year, 5% loan, annual prop tax payment)</b>	<b>Total Capital Cost</b>	<b>Annual</b>	<b>Monthly</b>			
Local - MBR (all parcels same)	\$ 53,495	\$ 3,480	\$ 89.61			
City of Solvang connection (all parcels same)	\$ 26,817	\$ 1,744	\$ 68.87			
<b>SY CSD Totals</b>	<b>Connect charge</b>		<b>Monthly</b>			
Single Family	\$75,000-100,000		\$ 86.87			
Single Family add unit			\$ 64.65			
Hotel per room no kitchen			\$ 40.41			
Restaurant			\$ 426.67			
Wine taste no food			\$ 109.10			
Elementary school per student			\$ 2.61			
<b>Advanced On-site</b>	\$30,000-70,000		\$1,500-\$1,900			Yes*
<b>Effluent Disposal</b>						
Percolation Ponds	\$ 2,200,000			minimal		Yes
Percolation Chambers	\$ 5,200,000			minimal		Yes
Shallow Aquifer Injection Wells	\$ 1,400,000			\$3,000,000-4,000,000		Yes
<< reuse >> as additive to one of the above	Site specific			unknown		Yes

Grant Potential	Risks	Disruption				Notes
		Construction		On-Going		
		Community	Individual Parcel	Community	Individual Parcel	
Yes		Medium	Lower	Low	Very Low	
Less likely if owned by property owner (except lower income)		Low	Higher	Low	High	Additional O&M costs assuming District owns and maintains tanks and pumps on individual parcels, does not include on-site electrical costs
Less likely if owned by property owner (except lower income)		Medium	Medium	Low	Medium	
Yes		Medium	None	Low	None	\$125,000 estimate from Cloacina partner for equipment consumables, spare parts, replacement, power, labor, chemicals; O&M number includes all costs including disposal, waste hauling
Yes		Medium	None	Low	None	
Less likely if owned by property owner (except lower income)		Very Low	High	Very Low	High	
		Low	Low	Low	Low	1.5 acres, with 100% redundancy
		Low	Low	Low	Low	4 acres, including 100% redundancy
		Low	Low	Low	Low	Assumes 3 injection wells, \$300k/well
Yes						

Cost Component (per parcel, annual)		Gravity, MBR, Perc	Effluent, MBR, Perc	Gravity, Solvang	Effluent, Solvang
Gravity Capital	\$ 4,885.50	\$ 4,885.50		\$ 4,885.50	
Gravity O&M	\$ 216.00	\$ 216.00		\$ 216.00	
Effluent Capital	\$ 3,783.67		\$ 3,783.67		\$ 3,783.67
Effluent O&M	\$ 279.60		\$ 279.60		\$ 279.60
MBR Capital	\$ 3,479.90	\$ 3,479.90	\$ 3,479.90		
MBR O&M	\$ 1,075.27	\$ 1,075.27	\$ 1,075.27		
Solvang Capital	\$ 1,744.50			\$ 1,744.50	\$ 1,744.50
Solvang O&M	\$ 826.44			\$ 826.44	\$ 826.44
Perc Capital	\$ 909.32	\$ 909.32	\$ 909.32		
Perc O&M	\$ -	\$ -	\$ -		
<b>TOTAL</b>		<b>\$ 10,565.99</b>	<b>\$ 9,527.76</b>	<b>\$ 7,672.44</b>	<b>\$ 6,634.20</b>

Notes: All parcels treated the same  
All capital assume 5% loan, 30 year

	Existing Flows		20-Year Buildout Design Flows		ADUs		20-Year Buildout w/ADUs	
	Daily	Max Monthly (Peak)	Daily	Max Monthly (Peak)	Daily	Max Monthly (Peak)	Daily	Max Monthly (Peak)
	*ADF	*MDF	*ADF	*MDF	*ADF	*MDF	*ADF	*MDF
Zone 1 - Commercial	24,789	79,325	40,635	130,032	-	-	40,635	130,032
Zone 1 - Residential	3,010	9,632	3,118	9,978	-	-	3,118	9,978
Zone 2 - Residential lots near downtown ("small lots")	10,535	33,712	10,750	34,400	-	-	10,750	34,400
Zone 3 - Remaining Lots	58,074	185,837	63,252	202,406	2,580	8,256	65,832	210,662
<b>Total</b>	<b>96,408</b>	<b>308,506</b>	<b>117,755</b>	<b>376,816</b>	<b>2,580</b>	<b>8,256</b>	<b>120,335</b>	<b>385,072</b>

Peaking Factor

3.2

	Existing Flows		20-Year Buildout w/ADUs	
	Daily (GPD)	Max Monthly (Peak GDP)	Daily (GPD)	Max Monthly (Peak GPD)
Zone 1 - Commercial	24,789	79,325	40,635	130,032
Zone 1 - Residential	3,010	9,632	3,118	9,978
Zone 2 - Residential lots near downtown ("small lots")	10,535	33,712	10,750	34,400
Zone 3 - Remaining Lots	58,074	185,837	65,832	210,662
<b>Total</b>	<b>96,408</b>	<b>308,506</b>	<b>120,335</b>	<b>385,072</b>

Category	Subcategory	Needed for Capital calcs / info	Responsible	Needed for O&M calcs / info	Responsible	Risk
Collection	Gravity Fed Effluent			yes	Savage	Spill
	Ownership If District ownership	Parcel owner's cost Pros/cons of ownership Impacts of improper installation and/or use Breakdown of responsibilities depending on ownership Easements		yes	Savage	
Collection	Middle miles (LOCS to Sunny Field)	yes	Stantec	yes	Savage	
	Middle miles (LOCS to Dunn)	yes	Use Stantec report to calc	yes	Savage	
Treatment	Solvang	Buy-in cost (line upgrades?)	Savage	yes	Savage	Spill
	Contract with City of Solvang					
	Solvang - Shared infrastructure	Pay line upgrades?	Savage	yes	Savage	
	Local - Location (siting)					
	Local - If phased downtown only	yes	Savage / Clocina	yes	Savage / Clocina	
Treatment	Local - Dunn	yes	Savage			
	Local - Available sites for treatment facility					
	Local - Availability of qualified operators (certifications)					
Status Quo	Local - What happens to Mattei's existing system					
	Risks, impacts, etc.					Letter re:consequences CCRWQCB
Advanced Onsite	Can it be a Plan B approach if Prop 218 fails Is it viable from a CCRWQCB perspective Is it truly an option for "all" parcels					
Grants	Which system(s) have a higher likelihood of obtaining grants (or more grants) Phased in district Connect to Solvang					
Disposal	Solvang included in Treatment discussion Available sites for Disposal					
Permits	Discharge permit			yes	Savage	Spill risk collection and transmission Acquisition of property Transfer of risk (for example from LOCS to City of Solvang)
Others	Need to poll community on desired approach Assessment Engineer Report Rate Study					