

Lakota Upgrades - Other (Details)

2022 CIP Summary - Draft 10/30/2021													
a	#	Project Name	Budget by Year										x
			Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	
x	5200009	Lakota Solids System Improvements	\$ 6,522	\$ 6,228	\$ 12,400	\$ 1,000	\$ 9,550	\$ 9,600	\$ 7,800	\$ 16,000	\$ 14,800		
x	5200210	Lakota Liquid Stream Improvements	\$ 8,135	\$ 1,000									
x	5200260	Lakota PC Scum System Upgrade/Drive Replacements	\$ 210	\$ 2,013	\$ 978								
x	5200234	Lakota Existing Generator Replacement	\$ 1,685	\$ 100									
x	5200249	Lakota PLC Processor Upgrade	\$ 365	\$ 150	\$ 150		\$ 750	\$ 750					
x	52xxx	Lakota Electrical Service and Generator Upgrade	\$ -	\$ 600	\$ 500	\$ 1,000	\$ 12,100	\$ 12,100					
x	52xxx	Lakota Odor Study/Odor System Replacement	\$ -	\$ -			\$ 1,750	\$ 2,000	\$ 2,000	\$ 2,000			
x	Program	Lakota Upgrades - Other	\$ 1,854	\$ 1,760	\$ 1,150	\$ 1,150	\$ 650	\$ 800	\$ 950	\$ 1,200	\$ 1,000	\$ 1,000	\$ 1,000
	5200199	Lakota O&M Manual Update (Ph II)	\$ 327										
	5200228	Lakota Primary Clarifier Drive Replacements (2)	\$ 362										
	5200240	Lakota Air Compressor AC-292 Replacement	\$ 8										
	5200244	Lakota OCS Recirc Pump Replacement (EF-201)	\$ 42										
	5200247	Lakota Primary Clarifier Drive Replacement (201)	\$ 25										
	5200250	Lakota Dewatering Hoppers (2)	\$ 12										
	5200252	Lakota Density Meter	\$ 23										
	5200251	Lakota Digester Transfer Pump Replacements (2)	\$ 90										
	5200255	Lakota Basin Drain Pump (P-282) Replacement	\$ 9										
	5200262	Lakota Headworks Lighting Upgrade	\$ 14										
	5200263	Lakota OCS Fan Replacement (EF-201)	\$ 85										
	5200264	Lakota Control Panel Touchscreen - Spares (2)	\$ 16										
	5200265	Lakota OC Recirc Pump Replacement (259A)	\$ 17										
	5200266	Lakota Digester Roof Replacement	\$ 50	\$ 1,050									
	52xxx	Lakota SC Flow Control Gates Replacement (6)	\$ -	\$ 100									
	52xxx	Lakota Influent & Effluent Amonia Analyzers	\$ -	\$ 75									
	5200253	Lakota Switchboard 240 & 270 Breaker Replacements	\$ 703	\$ 175									
	52xxx	Lakota Co-Thickening System Evaluation	\$ 70	\$ 40									
	52xxx	Lakota Lab Autoclave and Incubator Replacements	\$ -	\$ 20									
	52xxx	Lakota Plant Condition Assessment and UMS Tool	\$ -		\$ 200	\$ 300							
	52xxx	Lakota Plant Water System Improvements	\$ -	\$ 50	\$ 450								
	52xxx	Lakota Aeration System Diffusers Replacement	\$ -			\$ 350	\$ 150	\$ 100					
	52xxx	Lakota New BNR	\$ -				\$ 200	\$ 200	\$ 200				
	Program	Lakota Plant Upgrades - Undefined	\$ -	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 750	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
		Other	\$ -										
		<u>Potential Lakota Projects (included as "Undefined"):</u>											
	52xxx	Lakota Digester Control Room HVAC Upgrade	\$ -	\$ 125									
	52xxx	Lakota Creek Fish Ladder Repair	\$ -		\$ 500	\$ 500							
	52xxx	Lakota Storm Study	\$ -		\$ 360								
	52xxx	Lakota Headworks/DAFT Building Ventilation Upgrade	\$ -				\$ 500	\$ 500	\$ 500				
	52xxx	Lakota Septage Receiving Pump/Grinder Upgrades	\$ -						\$ 100				
	52xxx	Lakota Sludge Screen Relocation	\$ -						\$ 200				
	52xxx	Lakota New Disc Filters for Effluent	\$ -						\$ 500	\$ 1,000	\$ 1,700		
	52xxx	Lakota Replace and Upgrade Vector Decant	\$ -						\$ 100				
	52xxx	Lakota Outfall Upgrade	\$ -										
	52xxx	Lakota Retrofit Anoxic Selector Zone	\$ -										
	52xxx	Lakota Maintenance Building HVAC Upgrade	\$ -	\$ 150	\$ 600								
				\$ 275	\$ 600	\$ 860	\$ 500	\$ 500	\$ 500	\$ 1,300	\$ 1,100	\$ 1,700	\$ -

Lakota Upgrades - Other (Details)	Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Grand Total	18,771	11,851	15,178	3,150	22,300	25,000	11,500	19,200	17,800	1,000	1,000
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	18,771	11,851	15,178	3,150	22,300	25,000	11,500	19,200	17,800	1,000	1,000

(3) The timing of Biological Nutrient Removal (BNR) is still an unknown, but estimated beyond 2030 (\$40M for Lakota, in 2015 dollars). Initial study included.
 (4) Unscheduled
 (6) Projects associated with 2017 Agreement with PSA.

Redondo Upgrades - Others (Details)

2022 CIP Summary - Draft 10/30/2021													
a	#	Project Name	Budget by Year										x
			Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	
x	5200185	Redondo Electrical & West Odor Upgrades	\$ 1,017	\$ 1,200	\$ 5,000	\$ 10,000	\$ 5,000						
x	5200165	Redondo UV/Filtration System Upgrade	\$ 7,095	\$ 200									
x	5200233	Redondo Existing Generator Replacement	\$ 1,114	\$ 100									
x	52xxx	Redondo East Odor Control Improvements	\$ -					\$ 1,000	\$ 5,000				
x	Program	Redondo Plant Upgrades - Undefined	\$ 291	\$ 655	\$ 1,425	\$ 1,485	\$ 1,360	\$ 700	\$ 1,750	\$ 1,200	\$ 3,400	\$ 3,400	\$ 2,900
	5200200	Redondo O&M Manual Update (Ph II)	\$ 190										
	5200248	Redondo Mixing Zone Study	\$ 41										
	5200256	Redondo E Odor Pump (301/302) Replacements (2)	\$ 20										
	5200257	Redondo Sludge/Grinder Pump (SG 102/SG 503) Replaceme	\$ 22										
	5200258	Redondo Filtrate Pump (401/402) Replacements (2)	\$ 18										
	52xxx	Redondo Influent Flow Control Gates Replacement	\$ -	\$ 90									
	52xxx	Redondo Primary/Secondary Pump Replacements (8)	\$ -	\$ 100	\$ 100								
	52xxx	Redondo Plant Water System Improvements	\$ -	\$ 50	\$ 250								
	52xxx	Redondo Instrumentation and Control System Replacement	\$ -	\$ 15	\$ 75	\$ 75		\$ 100	\$ 350				
	52xxx	Redondo BioTower Safety Improvements	\$ -	\$ 200									
	52xxx	Redondo Heating System Upgrades	\$ -		\$ 450	\$ 400							
	52xxx	Redondo Plant Condition Assessment and UMS Tool	\$ -		\$ 150	\$ 150							
	52xxx	Redondo PC #1 and #2 Sludge Collector Replacement	\$ -		\$ 100	\$ 460	\$ 460						
	52xxx	Redondo Digester Cleaning	\$ -			\$ 500					\$ 500		
	52xxx	Redondo Control Building (Adm)/UV Roof Replacement	\$ -				\$ 200	\$ 1,000					
	52xxx	Redondo Headworks Upgrade and MBR Conversion	\$ -						\$ 800	\$ 3,000	\$ 2,500	\$ 2,500	(3)
	Program	Redondo Plant Upgrades - Undefined	\$ -	\$ 200	\$ 300	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
		Other	\$ -										
		<u>Potential Redondo Projects (included as "Undefined"):</u>											
	52xxx	Redondo Waste Gas Flame and Pipe Replacement	\$ -	\$ 50	\$ 150								
	52xxx	Redondo Headworks & Admin Make Up Unit Replacement	\$ -	\$ 100	\$ 200								
	52xxx	Redondo Biotower Improvements	\$ -		\$ 100	\$ 500	\$ 500	\$ 400					
	52xxx	Redondo SC #1 and #2 Sludge Collector Replacements	\$ -		\$ 100	\$ 400	\$ 400						
	52xxx	Redondo Storm Study	\$ -		\$ 60								
	52xxx	Redondo Add Air Release Vents to Outfall	\$ -							\$ 200			
	52xxx	Redondo Roto Disk Thickener	\$ -										(5)
				\$ 150	\$ 610	\$ 900	\$ 900	\$ 400	\$ -	\$ -	\$ 200	\$ -	\$ -

Redondo Upgrades - Others (Details)	Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Grand Total	9,517	2,155	6,425	11,485	6,360	700	2,750	6,200	3,400	3,400	2,900
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	9,517	2,155	6,425	11,485	6,360	700	2,750	6,200	3,400	3,400	2,900

(3) Currently only showing Headworks Ph I cost, remaining cost for Ph II and Membrane Bio-Reactors (MBR) is estimated beyond 2030 (~\$40M in 2015 dollars)
 (5) May not be needed with filtration.

Pump Station Upgrades - Other (Details)

2022 CIP Summary - Draft 10/30/2021													
a	#	Project Name	Budget by Year										x
			Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	
x	5204401	Pump Station 33 Upsize & Force Main Reroute	\$ 6,589	\$ 4,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
x	5200094	Pump Station Telemetry System Upgrade	\$ 40	\$ 215	\$ 300	\$ 300	\$ 200	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -
x	52xxx	Pump Station 12 - Service Gear ATS Install	\$ -	\$ 100	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
x	Program	Pump Station Upgrades - Other	\$ 176	\$ 200	\$ 250	\$ 300	\$ 300	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150
	5200209	Pump Station 10 VFD CP Replacement	\$ 176										
	52xxx	Pump Station Electrical Upgrades	\$ -	\$ 150	\$ 200	\$ 200	\$ 200						
	52xxx	Pump Station 13 - Replacement	\$ -			\$ 85							
	Program	Pump Station - Undefined Upgrades	\$ -	\$ 50	\$ 50	\$ 15	\$ 100	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150
		Others	\$ -										
		<u>Potential Pump Station Projects (included as "Undefined"):</u>											
		Station 22 Wet Well Rehabilitation											
		Pump Stations 12 and 35 Reconfiguration											
		<u>Potential "Other" As Required by Development</u>											
	5203367	Pump Station 44 - South End Diversion	\$ 116										
		Jovita Heights Pump Station											
		Pump Station 12 Upgrade											
		Pump Station 41 Upgrade											
		Pump Station 43 Upgrade											

Pump Station Upgrades - Other (Details)	Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Grand Total	6,804	4,646	800	600	500	350	150	150	150	150	150
Water	-	-	-	-	-	-	-	-	-	-	-
Wastewater	6,804	4,646	800	600	500	350	150	150	150	150	150

(7) Dependant on Development

Sewer Main Collection Program (Details)

2022 CIP Summary - Draft 10/30/2021													
a	#	Project Name	Budget by Year										x
			Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	
x	5200238	SM- PS 5-A2 Rehabilitation Area (I&I Ph 3)	\$ 2,752	\$ 100									
x	5200261	SM- PS 5-A2 Rehabilitation Area (I&I Ph 4)	\$ 750	\$ 250									
x	52xxx	SM- Basin Diversion Main (Red to Lak)	\$ 400	\$ 1,000	\$ 2,400	\$ 1,600							
x	52xxx	Wastewater System Plan - 2023	\$ -	\$ 400	\$ 350								
x	5200056	SM-FW Downtown Trunk Upgrade	\$ 2,851			\$ 250	\$ 2,000	\$ 2,600					
x	Program	SM-Collection Improvements	\$ 4,611	\$ 735	\$ 925	\$ 1,885	\$ 550	\$ 550	\$ 3,250	\$ 3,050	\$ 3,050	\$ 3,050	\$ 3,050
	5200246	CCTV Software Update	\$ 40										
	5200239	SM-Force Main Evaluations/Repair	\$ 128										
	5205598	I & I Study	\$ 3,075	\$ 5									
	5200259	WWSP Update and Nutrient Evaluation	\$ 240	\$ 310									
	52xxx	Pierce County Sewer Service Area Transfer	\$ -	\$ 25	\$ 25								(8)
	52xxx	Redondo Siphon Rehabilitation	\$ -		\$ 375								(8)
	52xxx	Pump Station 11 Force Main Replacement	\$ -			\$ 1,335							(8)
	52xxx	Dash Point siphon Replacement	\$ -					\$ 2,700					(8)
	5201013	Oversizing - Sewer	\$ 1,128	\$ 25	\$ 25	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
	Program	SM-Rehabilitation - Undefined	\$ -	\$ 370	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
		Other	\$ -										
		<u>Potential Rehab Areas (included as "Undefined"):</u>											
		SM-Redondo PS 6-B SubBasin (Area A)											
		SM-Redondo PS 6-A1 SubBasin (Area A)											
		SM-Redondo MVD-2 SubBasin (Area A)											
		SM-Redondo PS 6-A2 SubBasin (Area A)											
		SM-Redondo Steel Lake B2 SubBasin (Area A)											
		SM-S. 288th St: 21st Ave S to 18th Ave S Sewer Upgrade											
		Slip line sewer line at 324th and 40 Ave S											
		Manhole rehab at 298th and 25PL S											
		Meredith Siphon barrel											
		CIPP sewer line at 7th pl S and 322nd AB 187 Mh f-5 to f-4											
		Line sewer main on N side of 320 from PAC Highway to 24th Ave., South											
		Replace sewer main MH 553-2 to MH 553-1 288th 13 s											
		Sewer main rehab 320th & 23rd Ave S. MH 433-21-666 to MH 433-21-65											
		Joint repair 320th & 23Ave S. MH 443-21-65 to MH 732-1											
		Sewer main rehab 320th & 23Ave S. MH 445-21-74 to MH 777-6											
		Replace sewer main 287th & 14th Ave S. MH 340A to MH 275-347-A											
		Sewer main rehab 321st & 2nd Ave SW. MH 640-34 to MH 395-14											
		Lakota Trunk from (Lakota WWTP to 21st Ave SW)											
		Lakota Trunk - 21st Ave SW to I-5 - Evaluation											
		8th Ave @ S 33rd St (MH 400-36 to 400-35)											
		MH rehabs: 377-222 to 377-496 through 378-509A											
		MH rehabs 41-30B thru 41-30D											
		<u>Potential "Other" As Required by Development</u>											
		Un-Sewered Areas											
		Edgewood Flow Accomodation											
		Pierce County Sewers											
		Dash Point Sewers											
		72nd Ave NE Sewer Trunk											
		Oversizing-Starwater SM Extension											
Sewer Main Collection Program (Details)			Pre-2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Grand Total			11,364	2,485	3,675	3,735	2,550	3,150	3,250	3,050	3,050	3,050	3,050
Water			-	-	-	-	-	-	-	-	-	-	-
Wastewater			11,364	2,485	3,675	3,735	2,550	3,150	3,250	3,050	3,050	3,050	3,050

(8) Funded for negotiations - Actual costs are dependent on

