

Pond number

Pond number	Aerated Lagoon										Total area no ponds 98.10 171,1207 136,3914 156.46 no AL or P1		
	4	9	16	19	20	25	3	3	3	3		3	
Bottom Elevation average	4	9	16	19	20	25	3	3	3	3	3	3	
Water Surface Elevation	18	17	16	15	17	18	14	14	14	14	14	14	
Berm elevation	20	20	19	18	17	16	15	14	13	12	11	10	
Side Slope, Rise/Run	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Water depth, ft	14.00	7.25	7.00	9.00	8.50	9.75	9.50	11.25	9.00	9.00	5.60	5.60	8.575
Freeboard, ft	2	3	3	3	3	3	3	3	3	3	3	3	
Top of Berm	275	600	600	600	600	600	600	600	600	600	600	600	
Length, ft	600	1,331	1,331	1,331	1,331	1,350	1,331	1,331	1,331	1,350	1,331	1,331	
Width, ft	870	870	870	870	870	870	870	870	870	870	870	870	
Area, sf	165,000	522,000	798,600	798,600	798,600	810,000	798,600	798,600	798,600	810,000	810,000	798,600	181,8162
Water surface	259	576	576	576	576	576	576	576	576	576	576	576	
Length, ft	584	846	1,307	1,307	1,307	1,326	1,307	1,307	1,307	1,324	1,307	1,307	
Width, ft	151,256	487,296	752,832	752,832	752,832	752,832	752,832	752,832	752,832	752,832	752,832	752,832	
Area, sf	3.47	11,19	17,28	17,28	17,53	17,53	17,28	17,28	17,28	17,53	17,45	17,28	
Area, Acres													
Bottom surface	147	518	520	504	508	488	500	488	498	504	502	532	
Length, ft	472	788	1,251	1,235	1,258	1,249	1,231	1,217	1,234	1,252	1,283	1,283	
Width, ft	69,384	408,184	650,520	622,440	639,064	621,504	615,500	591,482	632,018	628,904	671,916	671,916	
Area, sf	1,59	9,37	14,93	14,29	14,67	14,27	14,13	13,58	14,51	14,43	15,43	15,43	
Area, Acres	11,551	24,281	36,741	46,291	44,601	50,511	48,621	56,581	46,981	46,741	29,31	44,21801	
Volume, mg/gal	35,46	74,52	112,76	142,07	138,87	155,03	149,21	173,59	144,19	143,44	89,95	1357,091	
Volume, ac-ft													

Invert of transfer structure	series	parallel	Length, ft	Width, ft	Area, sf	volume @inverting series	full depth no 2 feet difference										AL + P1 mg	P 2, 3, 6 & 7 mg	p5+p8 mg	not last 2 ft	Treatment ponds storage available in winter	max storage
							30.39	53.96	80.54	110.50	104.67	123.23	117.80	142.73	112.15	111.56						
	16.00	15.50	14.50	13.00	8.25	13.00	13.00	11.50	6.25	5.68	5.68	4.75	10.00	10.00	8.50	7.7	5.00	A transfers				
	243	564	564	560	1,291	568	568	522	562	562	562	4.75	5.68	5.68	5.68	5.68	5.68	B&C transfers				
	568	834	1,295	1,291	1,312	1,312	1,299	1,299	1,299	1,318	1,318	1,308	1,299	1,318	1,308	1,279	1,279					
	138,024	470,376	730,380	722,960	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344	737,344					
	9.31	18.89	28.41	35.23	38.93	40.66	43.03	46.34	41.31	39.56	10.27	348.43	1,098.37									
	30.39	53.96	80.54	110.50	104.67	123.23	117.80	142.73	112.15	111.56	57.24	348.22	1091.78									
	25.33	33.41	48.32	78.93	72.46	91.43	86.38	111.87	80.11	79.69	24.53											

Storage, ac-ft
 Total of ponds 1-10
 Total of ponds 1-8
 Total of ponds 2-6
 Total of ponds 2-9
 Total of ponds 3-10

full depth no 2 feet difference
 1321.63 1014.38 307.25
 1088.25 845.58 242.67
 1013.73 791.62 222.11
 1247.11 960.42 286.69
 1167.17 903.18 253.99
 1194.39 879.88 254.48

AL + P1 P 2, 3, 6 & 7
 mg mg
 35.83 188.21

sun(AL,1,2,3,6,7) =
 697.61 ac-ft
 Try to keep 110-120 mg storage available in winter
 337,6006 ac-ft
 984.03

500 A transfers
 5.00 A transfers
 508.85 931.15
 P4,5,8,9,(1) available

1 ac-ft = 43560 cf
 325828.8 gal
 0.3258288 mgal

AL	35.46
1	74.52
2	112.76
3	142.07
4	136.87
5	155.03
6	149.21
7	173.59
8	144.19
9	143.44
10	89.95

Ponds 1-8 and AL 1123.71
 Ponds 1-6,8 and AL 950.11
 Ponds 1-7 and AL 979.51
 Ponds AL,1,2,3,6,7 687.61
 Ponds AL,1,2,3,6 514.02

AL,P1,p2,p3,p6,p7
 687.61
 ac-ft