

Uruti Irrigation Model

Month	May	June	July	August	September	October	November	December	January	February	March	April
Evaporation mm	31.12	21.41	25.43	39.04	57.48	85.05	109.32	126.01	134.46	107.97	88.65	52.65
Rainfall mm	181.20	189.51	181.83	178.04	175.35	188.38	149.39	149.04	120.00	107.02	119.22	151.25
Rainfall onto pad 1/1mm rainfall	1.94	351.75	367.89	352.98	345.61	340.41	365.69	290.00	289.32	232.94	207.75	231.43
Rainfall onto pad 3/1mm rainfall	2.03	368.42	385.32	369.70	361.99	356.54	383.02	303.75	303.03	243.98	217.59	242.40
Rainfall onto pond/1mm rainfall	4.30	779.16	814.89	781.86	765.55	754.03	810.04	642.38	640.87	515.99	460.17	512.64
Liquid deliveries	187.50	187.50	187.50	187.50	187.50	187.50	187.50	187.50	187.50	187.50	187.50	187.50
Truck wash water	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Total liquids entering the pond system	1,736.84	1,805.60	1,742.04	1,710.65	1,688.47	1,796.26	1,473.63	1,470.72	1,230.41	1,123.00	1,223.98	1,488.98
Evaporation from ponds	4.30	(133.8)	(92.1)	(109.3)	(167.9)	(247.2)	(365.7)	(470.1)	(541.9)	(464.3)	(381.2)	(226.4)
Balance to be irrigated	(1,603.0)	(1,713.5)	(1,632.7)	(1,542.8)	(1,441.3)	(1,430.5)	(1,003.5)	(928.9)	(652.2)	(658.7)	(842.8)	(1,262.6)
Irrigation vol	M3	900.0	900.0	900.0	1,200.0	1,200.0	1,500.0	1,500.0	1,200.0	1,200.0	1,200.0	1,200.0
Hours irrigating per month		(30.0)	(30.0)	(30.0)	(40.0)	(40.0)	(50.0)	(50.0)	(40.0)	(40.0)	(40.0)	(40.0)
Surplus liquid		(703.0)	(813.5)	(732.7)	(342.8)	(241.3)	69.5	496.5	271.1	547.8	541.3	357.2

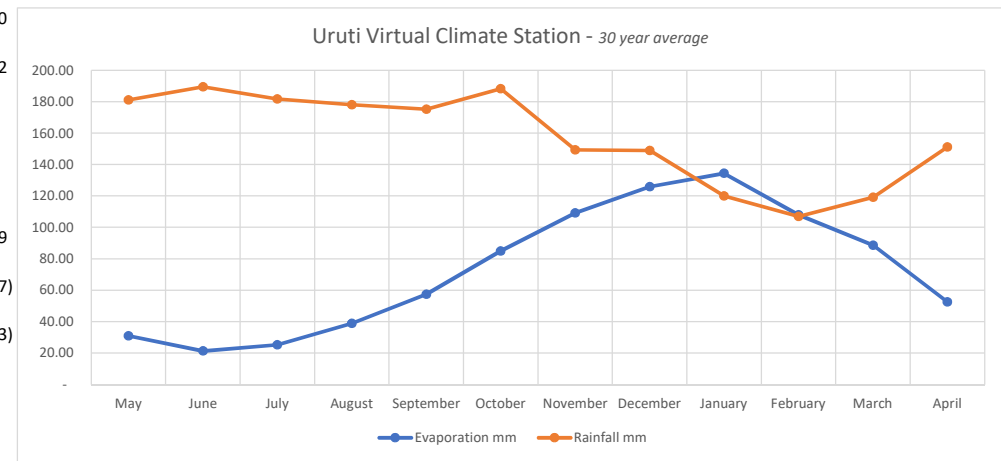
878.60

1,890.22

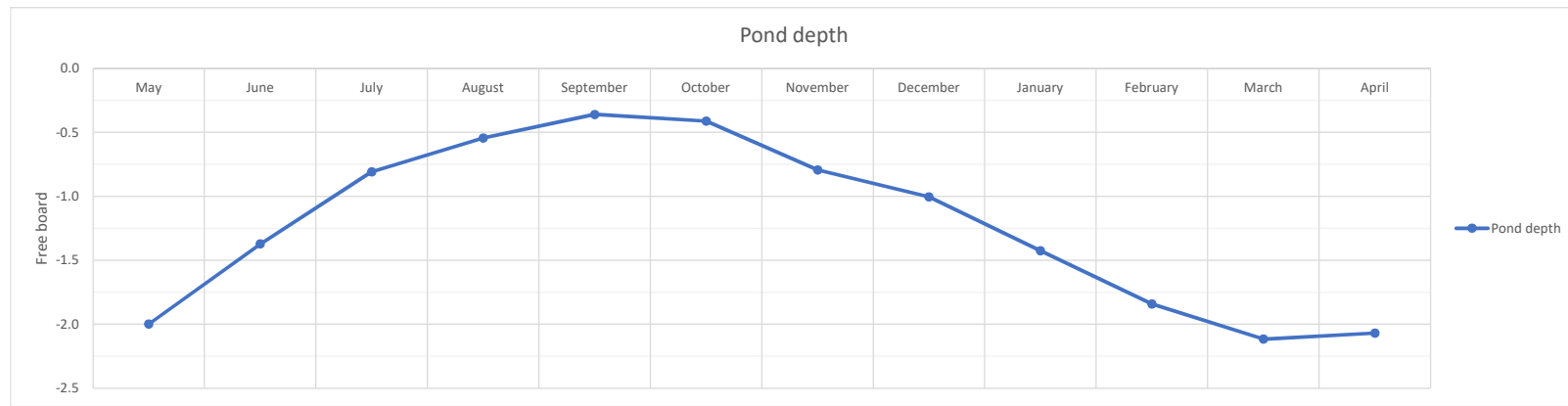
18,490.59

(3,777.97)

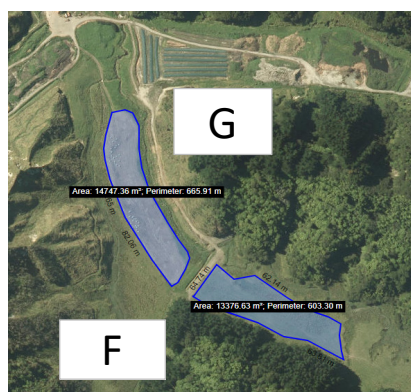
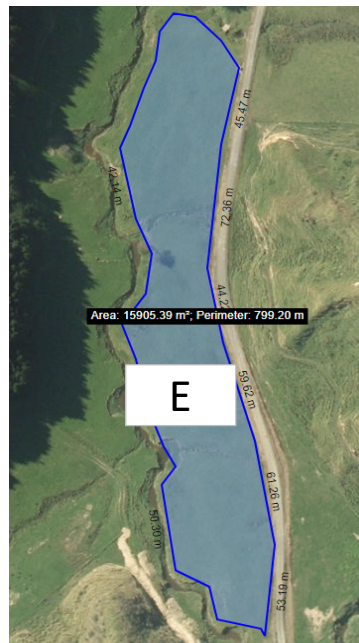
(14,712.63)



Pond vol at 1st day of month	3,300.0	2,597.0	1,783.4	1,050.7	707.9	466.6	536.1	1,032.6	1,303.7	1,851.5	2,392.8	2,749.9
Surplus liquid	(703.0)	(813.5)	(732.7)	(342.8)	(241.3)	69.5	496.5	271.1	547.8	541.3	357.2	(62.6)
Pond vol at end of month	2,597.0	1,783.4	1,050.7	707.9	466.6	536.1	1,032.6	1,303.7	1,851.5	2,392.8	2,749.9	2,687.4
Pond vol per metre	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0	1,300.0
Pond depth	-2.0	-1.4	-0.8	-0.5	-0.4	-0.4	-0.8	-1.0	-1.4	-1.8	-2.1	-2.1



	1mm on Pads & Ponds	Runoff coefficient	M3 runoff per 1mm of rainfall
Rainfall Pad 1	7,765	0.25	1.94
Rainfall Pad 3	8,133	0.25	2.03
Rainfall Ponds	4,300	1	4.30
Evaporation Ponds	4,300	1	4.30
Liquid deliveries m3/month	375	Used in composting	0.50
Actual deliveries 2017		Composting MC best between 40 & 60%	187.50
Pond Volume	1304	m2 1 m depth	M3 per m
Freeboard	1304	0.5	652
Irrigation area	11 Ha	1mm on 1 ha	Vol Irrigated
		10	110
Irrigation depth	8 mm	Vol irrigated	880
Irrigation run time/month	40		



Area	Ha	Ha
E	1.590	1.590
J	0.520	
J	0.908	1.428
H	0.353	
H	0.797	1.150
G	1.475	1.475
F	1.338	1.338
Total	6.981	

