Table 3.4-1: Water Elevations and Differences Between Deep and Shallow Wells.

Well ID	*Screen Interval*	*Ground Elevation at Well NGVD29*	*Water Elevations (1/30) NGVD 29*	*Water Elevation Difference (1/30)**	*Water Elevation (2/1) (NGVD 29)*	*Water Elevation Difference (2/1)*	*Water Elevations (2/4) NGVD 29*	*Water Elevation Difference (2/4)*	*Water Elevations (2/6) NGVD 29*	*Water Elevation Difference (2/6)*	*Water Elevations (2/11) NGVD 29*	*Water Elevation Difference (2/11)*
TI-1 deep	10 to 15 ft bgs	5.12	1.73		1.19		2.72		3.29		2.82	
TI-1 shallow	1 to 5 feet bgs	4.79	3.21	1.48	2.77	1.58	2.96	0.24	2.93	-0.36	2.89	0.07
TI-2 deep	10 to 15 feet bgs	4.54	2.68		1.97		2.32		2.36		2.37	
TI-2 shallow	1 to 5 feet bgs	4.46	3.43	0.75	3.27	1.3	3.13	0.81	3.11	0.75	2.53	0.16
HEW0 deep	10 to 15 feet bgs	3.43			-2.99		2.87		2.91		2.81	
HEW0 shallow	1 to 5 feet bgs	3.44			3.11	6.1	2.9	0.03	2.92	0.01	2.89	0.08
HEW2 deep	10 to 15 feet bgs	3.24			2.03		2.4		2.31		2.45	
HEW2 shallow	1 to 5 feet bgs	3.68			2.86	0.83	2.52	0.12	2.79	0.48	2.66	0.21
HEW6 deep	10 to 15 feet bgs	0.31					1.89		-0.74		-0.44	
HEW6 shallow	1 to 5 feet bgs	0.36					0.08	-1.81	0.11	0.85	0.04	0.48
GRD0 deep	10 to 15 feet bgs	1.11	0.96		1.02		1.01		1.01		0.96	
GRD0 shallow	1 to 5 feet bgs	3.39			3.24	2.22	3.35	2.34	3.32	2.31	3.28	2.32
GRD1 deep	10 to 15 feet bgs	4.4	3.62		3.35		3.28		3.3		3.28	
GRD1 shallow	1 to 5 feet bgs	4.44			3.4	0.05	3.27	-0.01	3.19	-0.11	3.21	-0.07
GRD2 deep	10 to 15 feet bgs	3.46	2.98		2.07		2.98		2.99		2.97	
GRD2 shallow	1 to 5 feet bgs	3.64			3.18	1.11	3.05	0.07	3.04	0.05	2.99	0.02
GRD3 deep	10 to 15 feet bgs	3.4	3.06		3.13		3.03		2.95		3.03	
GRD3 shallow	1 to 5 feet bgs	3.51			3.25	0.12	3.19	0.16	2.07	-0.88	3.16	0.13
GRD4 deep	10 to 15 feet bgs	0.53	0.26		0.35		0.66		0.54		0.19	
GRD4 shallow	1 to 5 feet bgs	0.12	0.1	-0.16	0.06	-0.29	-0.1	-0.76	0.02	-0.52	0.05	-0.14
GRD6 deep	10 to 15 feet bgs	0.84	0.09		0.02		0.06		0.04		-0.05	
GRD6 shallow	1 to 5 feet bgs	0.92	0.08	-0.01	0.03	0.01	0.04	-0.02	-0.04	-0.08	-0.08	-0.03
GRD8 deep	10 to 15 feet bgs	2.31	0.11		-0.14		-0.04		0.06		-0.1	
GRD8 shalllow	1 to 5 feet bgs	2.2	0.11	0	-0.06	0.08	-0.12	-0.08	-0.11	-0.17	-0.07	0.03
MW3A deep	4.5 to 14.5 ft bgs	2.32	2.11		2.05		2.05		1.92		1.97	
MW3A shallow	1 to 5 feet bgs	2.12			1.93	-0.12	1.79	-0.26	1.72	-0.2	1.72	-0.25
MW4A deep	8.5 to 18.5 ft bgs	6.19	5.74		5.6		5.56		5.59		5.57	
MW4A shallow	1 to 5 feet bgs	6.17			4.98	-0.62	5.11	-0.45	5.02	-0.57	5.26	-0.31
MW8A	8.5 to 18.5 ft bgs	1.15			-4.35		-2.32		-1.76		-1.24	
MW18	7.5 to 12.5 ft bgs	4.46			3		2.79		3.04		2.94	
MW19	9.5 to 15.5 ft bgs	5.19			2.41		2.32		2.34		2.54	
MW20	7.5 to 12.5 ft bgs	1.29			-0.22		-0.23		-0.22		-0.14	
MW25	4.5 to 7 ft bgs	1.57					2.6		1.52		2.56	
MW51	15 to 20 ft bgs	4.89			2.89		2.87		2.94		2.87	
MW58	10 to 20 ft bgs	7.64			2.33		2.37		2.39		2.39	
MW62 deep	18 to 20.5 ft bgs	4.9	2.65		2.54		2.49		2.55		2.51	
MW62 shallow	1 to 5 feet bgs	4.99	4.31	1.77	3.11	0.62	3.1	0.55	3.14	0.63		

Note: Water elevation differences are calculated by subtracting the water elevation at the deep well from the water elevation at the shallow well.

Table 3.4-2: Water Table Seasonal Variations

Well ID	Unit	Winter Water Level (ft)			Summer Water Level (ft)			Average Seasonal Variation (ft)
		Min	Avg	Max	Min	Avg	Max	
Northern Slough								
MW-15	Water Table	3.06	3.43	3.73	3.12	3.37	3.64	0.24
MW-62	Water Table	2.71	3.05	3.34	2.77	3.04	3.22	0.13
MW-7	Bedrock	1.77	2.63	3.05	2.36	2.57	2.85	0.24
MW-51	Water Table	2.83	3.43	3.84	3.07	3.43	3.82	0.19
MW-52	Intermediate	3.54	4.44	4.94	3.99	4.17	4.39	0.41
MW-53	Intermediate	4.79	5.26	5.72	4.45	4.96	5.45	0.30
MW-18	Water Table	2.95	3.68	4.21	2.84	3.08	3.36	0.61
MW-56	Water Table	3.25	4.55	4.94	3.59	4.23	4.60	0.52
MW-58	Water Table	1.88	2.99	3.65	2.37	3.13	3.53	0.29
							Northern Slough Average	**0.33**
Southern Slough								
MW-3A	Water Table	0.96	2.12	2.86	-0.34	1.01	2.55	1.22
MW-3	Bedrock	1.96	3.69	5.02	2.41	2.77	3.18	1.01
MW-27	Intermediate	4.23	4.89	5.59	3.96	4.65	5.22	0.30
MW-20	Water Table	-0.50	1.19	2.20	-0.81	0.20	0.91	1.06
MW-8A	Water Table	-0.61	0.28	0.82	-0.57	-0.05	0.38	0.39
MW-25	Water Table	-0.41	0.37	1.01	-2.61	-0.85	0.37	1.25
							Southern Slough Average	**0.87**
Water Table Unit								
MW-46	Water Table	1.57	2.76	4.25	0.79	2.05	2.65	0.71
MW-16	Water Table	2.91	3.45	4.33	2.20	2.75	3.55	0.72
MW-48	Water Table	1.99	3.27	3.73	2.26	2.65	3.21	0.73
MW-33	Water Table	6.66	7.00	7.40	4.72	5.34	5.75	1.66
MW-4A	Water Table	5.24	6.41	7.29	4.36	5.06	5.74	1.42
MW-30	Water Table	11.19	12.74	14.05	9.80	10.43	11.35	2.30
MW-23A	Water Table	8.73	9.87	12.44	8.83	9.91	11.66	0.51
MW-2A	Water Table	2.61	5.26	6.74	0.77	2.21	4.47	3.06
MW-19	Water Table	0.85	2.90	3.91	-0.48	0.75	1.79	2.21
MW-29	Water Table	2.81	6.03	6.98	1.85	3.67	4.68	2.36
MW-22	Water Table	-0.84	3.23	4.15	-0.22	0.39	1.18	2.97
MW-21	Water Table	-0.02	1.20	1.80	-0.19	0.29	0.87	1.03
							Water Table Unit Average	**1.64**
Intermediate Unit								
MW-50	Intermediate	1.92	2.37	3.05	2.06	2.24	2.52	0.21
MW-36	Intermediate	3.70	4.14	4.36	3.72	3.93	4.12	0.24
MW-64	Intermediate	3.52	4.31	4.90	3.55	3.83	4.29	0.51
MW-49	Intermediate	4.35	4.98	5.59	4.17	4.67	5.39	0.45
MW-2B	Intermediate	3.47	4.99	5.69	3.65	4.13	4.58	0.90
							Intermediate Unit Average	**0.46**
Bedrock Unit								
MW-11C	Bedrock	2.51	3.82	5.47	1.90	2.61	3.36	1.23
MW-4	Bedrock	7.48	8.41	9.85	6.69	7.11	7.70	1.32
MW-28	Bedrock	11.05	12.97	14.21	9.63	10.32	11.32	2.64
MW-2	Bedrock	3.23	4.69	5.37	3.41	3.86	4.33	0.87
MW-26	Bedrock	2.39	6.69	8.18	2.06	3.95	5.02	2.74
MW-24	Bedrock	0.97	3.89	5.42	2.38	2.93	3.74	1.31
							Bedrock Unit Average	**1.69**

Table 3.4-2.xls

Table 3.4-3: Soil Hydraulic and Physical Properties

	Sample Interval (ft bgs)	Hydraulic Conductivity (cm/s)	Hydraulic Conductivity (cm/s)	Porosity	Dry Bulk Density (g/cm^3)	USCS Class	Comments
Deep							
HC-1	9 - 11	8.27E-08	6.45E-08	0.77	0.61	OH	
HC-2	9 - 11	1.27E-07	1.56E-07	NA	0.25	PT	
HC-3	9 - 11	4.25E-08	8.17E-08	0.69	0.81	CH	
HC-4	9 - 11	3.60E-08	1.09E-07	NA	0.56	CH	
Shallow							
TI-1	1.5 - 2[a]	2.10E-04	NA	NA	1.00	ML/CL	Dredge spoil pile
TI-2	1.5 - 2[a]	1.67E-07	NA	NA	0.86	CL	Dredge spoil pile
HEW-0	0.5 -1	2.10E-06	2.70E-07	0.74	0.68	CH	
HEW-2	0.5 -1	2.40E-07	1.70E-07	0.80	0.48	CH	
HEW-6	0.5 -1	1.50E-07	1.10E-07	0.77	0.53	OH	
MW-3A	2 - 2.5[a]	2.90E-06	1.60E-06	0.33	1.79	SM	
MW-4A	1 -1.5[a]	2.90E-05	8.80E-07	0.35	1.74	SM	
MW-62	1.5 - 2[a]	1.20E-07	9.50E-06	0.62	1.02	CH	
Slug Test							
GRD-1	3 - 13	2.60E-05	NA	NA	NA	CH	

[a] Lower depth based on sampling native soil underlying fill or dredge spoil piles

NOTES:

cm/s = centimeters per second
ft bgs = feel below ground surface
g/cm^3 = grams per cubic centimeter
NA = not available/not applicable

United Soil Classification Symbols:
CH = fat clay (at this site bay mud)
CL = lean clay
ML = silt
OH = organic fat clay
PT = peat (>50% organic debris)
SM = silty sand

Table 3.4-4: Tidal Study Results

Well ID	Distance from Peyton Slough (ft)	Lag Time (m)	Tidal Efficiency (%)	Tidal Efficiency Regression Coefficient (R^2)	Maximum Water Level[1] (ft msl)	Minimum Water Level[1] (ft msl)
Peyton Slough	NA	NA	NA	--	4.10	-0.93
TI-1 Deep	29	27	7.8%	0.81	4.82	4.04
TI-1 Shallow	26	6	--	--	4.47	3.51
TI-2 Deep	16	7	7.4%	0.85	1.51	1.01
TI-2 Shallow	16	8	--	--	3.19	2.49
GRD-0	190[2] / 300	48	--	--	1.03	-0.13
GRD-1	97[2] / 271	76	--	--	3.71	3.15
MW-4	50	-6	2.8%	0.58[3]	7.47	7.12
MW-4A	46	91	0.6%	0.02[3]	6.13	5.43
MW-62	79	75	2.1%	0.29	2.86	2.60

Notes:

[1] After first 1000 minutes. First 1000 minutes not used due to displacement caused by insertion of transducer

[2] Distance to nearest mosquito abatement drainage channel

[3] Reduced fit due to outliners late in study. Late in the study this transducer experienced electronic drift

ft = feet

Elevations in NGVD 29