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***Lake Thunderbird TMDL Monitoring Plan Implementation:  
Sample Year (SY) 2021- May Report***

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**SY2021 Monthly Report**

*Lake Thunderbird TMDL Monitoring Plan Implementation:*

*May 2021 Monitoring Report*

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Oklahoma Water Resources Board  
Water Quality Programs Division  
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## SUMMARY OF MAY WATER QUALITY SAMPLING

Sampling for May 2021 occurred on the tenth and was considered a base flow collection. Water samples were collected at all ten locations and discharge measurements were collected at four locations. Mesonet data shows no precipitation on the tenth, no precipitation in the 72 hours prior to sampling, and 0.45 inches of precipitation in the 72 hours after the sampling event. The total rainfall amount in Norman for the month of May was 6.82 inches. All water level gauges were operational for the month, except for LT-1, TE-1, and TG-1 due to equipment malfunction.

## RESULTS

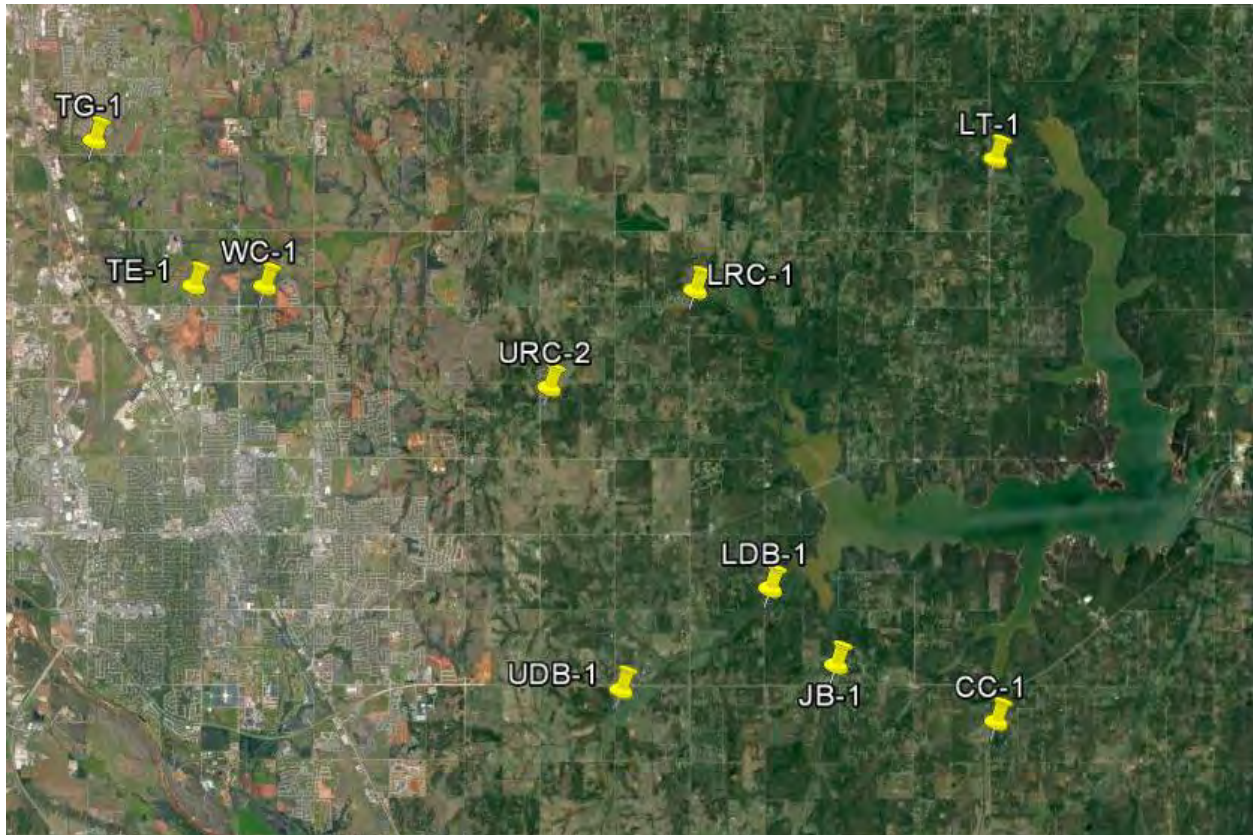


Figure 1 Monitoring Station Map

Monitoring Location ID	Monitoring Location Name	Date	Time	Field Crew	Water Temperature (°C)	Dissolved Oxygen (DO) (mg/l)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Notes
CC-1	Clear Creek	5/10/2021	10:45	SD	15.03	9.07	7.80	702	6	Noticeably less algae than usual, oil sheen present in side pools not connected to main channel
JB-1	Jim Blue Creek	5/10/2021	11:35	SD	15.67	8.51	7.71	772	10	Neither RP over water, orifice clear, visible flow
LDB-1	Lower Dave Blue Creek	5/10/2021	12:05	SD	19.16	4.67	7.70	971	32	Some positive visual flow
LRC-1	Lower Rock Creek	5/10/2021	13:20	SD	18.05	9.35	7.93	796	6	Orifice may have been slightly clogged
LT-1	Lake Laterals	5/10/2021	12:35	SD	17.57	3.53	7.45	480	14	
TE-1	Little River Tributary	5/10/2021	15:45	SD	20.43	8.99	7.64	994	11	Bubbler line broken during last storm event, still in process of repair; low water conditions, scum above small beaver dam
TG-1	Little River Tributary	5/10/2021	16:30	SD	18.84	12.25	7.86	1233	4	Some small gravel/filamentous on orifice, borderline low/normal flow conditions
UDB-1	Upper Dave Blue Creek	5/10/2021	9:25	SD	14.76	8.28	7.82	993	6	
URC-2	Upper Rock Creek	5/10/2021	14:20	SD	17.49	7.55	7.78	878	10	Same tapedown as last month, cows on bank before sampling, don't think they entered channel
WC-1	Woodcrest Creek	5/10/2021	15:05	SD	18.16	9.43	7.68	1145	5	Similar stage to last month, orifice was slightly buried by small gravel

Table 1 Field Data Form

Monitoring Location ID	Monitoring Location Name	Nitrate and Nitrite (mg/l)	Kjeldahl Nitrogen (mg/l)	Phosphorus (mg/l)	Total Suspended Solids (mg/l)
CC-1	Clear Creek	0.18	0.35	0.030	10.0
JB-1	Jim Blue Creek	<0.05	0.49	0.041	6.0
LDB-1	Lower Dave Blue Creek	0.17	0.68	0.064	44.0
LRC-1	Lower Rock Creek	<0.05	0.45	0.034	<5.0
LT-1	Lake Laterals	<0.05	0.76	0.071	16.0
TE-1	Little River Tributary	<0.05	0.65	0.042	20.0
TG-1	Little River Tributary	0.16	0.46	0.044	6.0
UDB-1	Upper Dave Blue Creek	0.08	0.36	0.025	<5.0
URC-2	Upper Rock Creek	<0.05	0.59	0.046	6.0
WC-1	Woodcrest Creek	0.17	0.55	0.076	18.0

Table 2 Laboratory Analysis Summary

Monitoring Location Name	Nitrate and Nitrite (mg/l)	Kjeldahl Nitrogen (mg/l)	Phosphorus (mg/l)	Total Suspended Solids (mg/l)
Field Blank	<0.05	<0.10	<0.010	<5.0
Duplicate	0.18	0.36	0.029	9.0
Duplicate RPD	0%	2.82%	3.39%	10.53%

Table 3 QA/QC Data

Quality assurance/quality control (QA/QC) of the data includes a field blank and duplicate sample from each collection event and is qualified by the OWRB. Relative Percent Difference (RPD) of the duplicate sample can be categorized into four levels, where Level 1 likely has no QA issues and Level 4 has major QA issues, and should be used with caution.

Monitoring Location ID	Monitoring Location Name	Discharge (cfs)	Stream Stage (ft)
CC-1	Clear Creek	1.50	21.09
JB-1	Jim Blue Creek	0.14	15.62
LDB-1	Lower Dave Blue Creek	23.55	17.09
LRC-1	Lower Rock Creek	1.72	17.84
LT-1	Lake Laterals	0.10	4.34
TE-1	Little River Tributary	0.01	11.01
TG-1	Little River Tributary	1.18	8.99
UDB-1	Upper Dave Blue Creek	2.36	17.47
URC-2	Upper Rock Creek	0.35	11.16
WC-1	Woodcrest Creek	0.12	7.66

Table 4 Station Discharge Summary

All rated stream discharges are provisional and subject to change.

# Discharge Measurement Summary

Date Generated: Fri Jun 11 2021

File Information				Site Details			
File Name	CC0510.WAD			Site Name	CC		
Start Date and Time	2021/05/10 09:33:12			Operator(s)	SCD		

System Information				Units (English Units)		Discharge Uncertainty		
Sensor Type	FlowTracker			Distance	ft	Category	ISO	Stats
Serial #	P4713			Velocity	ft/s	Accuracy	1.0%	1.0%
CPU Firmware Version	3.9			Area	ft^2	Depth	0.4%	1.6%
Software Ver	2.30			Discharge	cfs	Velocity	0.9%	10.0%
Mounting Correction	0.0%					Width	0.1%	0.1%
						Method	2.1%	-
						# Stations	3.3%	-
						<b>Overall</b>	<b>4.2%</b>	<b>10.2%</b>

Summary			
Averaging Int.	40	# Stations	15
Start Edge	LEW	Total Width	7.000
Mean SNR	44.6 dB	Total Area	2.174
Mean Temp	58.86 °F	Mean Depth	0.311
Disch. Equation	Mid-Section	Mean Velocity	0.6883
		<b>Total Discharge</b>	<b>1.4965</b>

Supplemental Data					
#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon May 10 09:45:44 CDT 2021	7.000	21.090		

Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	09:33	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
<i>1</i>	<i>09:33</i>	<i>0.50</i>	<i>0.6</i>	<i>0.300</i>	<i>0.6</i>	<i>0.120</i>	<i>0.3868</i>	<i>1.00</i>	<i>0.3868</i>	<i>0.150</i>	<i>0.0580</i>	<i>3.9</i>
2	09:34	1.00	0.6	0.300	0.6	0.120	0.6030	1.00	0.6030	0.150	0.0904	6.0
3	09:35	1.50	0.6	0.300	0.6	0.120	0.6293	1.00	0.6293	0.150	0.0943	6.3
<i>4</i>	<i>09:36</i>	<i>2.00</i>	<i>0.6</i>	<i>0.300</i>	<i>0.6</i>	<i>0.120</i>	<i>0.8802</i>	<i>1.00</i>	<i>0.8802</i>	<i>0.150</i>	<i>0.1320</i>	<i>8.8</i>
5	09:37	2.50	0.6	0.300	0.6	0.120	0.8632	1.00	0.8632	0.150	0.1294	8.6
<i>6</i>	<i>09:38</i>	<i>3.00</i>	<i>0.6</i>	<i>0.300</i>	<i>0.6</i>	<i>0.120</i>	<i>0.7825</i>	<i>1.00</i>	<i>0.7825</i>	<i>0.150</i>	<i>0.1173</i>	<i>7.8</i>
7	09:39	3.50	0.6	0.300	0.6	0.120	0.9085	1.00	0.9085	0.150	0.1362	9.1
8	09:40	4.00	0.6	0.300	0.6	0.120	0.8671	1.00	0.8671	0.150	0.1300	8.7
9	09:40	4.50	0.6	0.300	0.6	0.120	0.9350	1.00	0.9350	0.150	0.1402	9.4
<i>10</i>	<i>09:41</i>	<i>5.00</i>	<i>0.6</i>	<i>0.300</i>	<i>0.6</i>	<i>0.120</i>	<i>0.2224</i>	<i>1.00</i>	<i>0.2224</i>	<i>0.150</i>	<i>0.0334</i>	<i>2.2</i>
11	09:42	5.50	0.6	0.300	0.6	0.120	1.0253	1.00	1.0253	0.150	0.1537	10.3
12	09:43	6.00	0.6	0.400	0.6	0.160	0.6578	1.00	0.6578	0.200	0.1315	8.8
13	09:44	6.50	0.6	0.400	0.6	0.160	0.4616	1.00	0.4616	0.200	0.0923	6.2
14	09:44	7.00	None	0.500	0.0	0.0	0.0000	1.00	0.4616	0.125	0.0577	3.9

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 2 Discharge Measurement Summary CC-1

# Discharge Measurement Summary

Date Generated: Fri Jun 11 2021

File Information				Site Details			
File Name	LRC0510.WAD			Site Name	LRC		
Start Date and Time	2021/05/10 12:10:14			Operator(s)	SCD		

System Information		Units (English Units)		Discharge Uncertainty		
Sensor Type	FlowTracker	Distance	ft	Category	ISO	Stats
Serial #	P4713	Velocity	ft/s	Accuracy	1.0%	1.0%
CPU Firmware Version	3.9	Area	ft^2	Depth	0.5%	2.0%
Software Ver	2.30	Discharge	cfs	Velocity	0.5%	7.6%
Mounting Correction	0.0%			Width	0.2%	0.2%
				Method	2.4%	-
				# Stations	3.6%	-
				<b>Overall</b>	<b>4.5%</b>	<b>7.9%</b>

Summary			
Averaging Int.	40	# Stations	14
Start Edge	LEW	Total Width	7.000
Mean SNR	33.7 dB	Total Area	3.500
Mean Temp	64.65 °F	Mean Depth	0.500
Disch. Equation	Mid-Section	Mean Velocity	0.4903
		<b>Total Discharge</b>	<b>1.7161</b>

Supplemental Data					
#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon May 10 12:23:48 CDT 2021	7.000	17.840		

Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	12:10	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
<i>1</i>	<i>12:11</i>	<i>1.00</i>	<i>0.6</i>	<i>0.700</i>	<i>0.6</i>	<i>0.280</i>	<i>0.0728</i>	<i>1.00</i>	<i>0.0728</i>	<i>0.525</i>	<i>0.0382</i>	<i>2.2</i>
2	12:12	1.50	0.6	0.800	0.6	0.320	0.1263	1.00	0.1263	0.400	0.0505	2.9
3	12:13	2.00	0.6	0.750	0.6	0.300	0.6713	1.00	0.6713	0.375	0.2517	14.7
4	12:14	2.50	0.6	0.700	0.6	0.280	0.5305	1.00	0.5305	0.350	0.1857	10.8
5	12:15	3.00	0.6	0.700	0.6	0.280	0.7024	1.00	0.7024	0.350	0.2459	14.3
6	12:16	3.50	0.6	0.600	0.6	0.240	0.7054	1.00	0.7054	0.300	0.2116	12.3
7	12:17	4.00	0.6	0.600	0.6	0.240	0.6900	1.00	0.6900	0.300	0.2070	12.1
8	12:18	4.50	0.6	0.500	0.6	0.200	0.6411	1.00	0.6411	0.250	0.1603	9.3
9	12:19	5.00	0.6	0.400	0.6	0.160	0.5659	1.00	0.5659	0.200	0.1132	6.6
10	12:20	5.50	0.6	0.400	0.6	0.160	0.6066	1.00	0.6066	0.200	0.1213	7.1
11	12:21	6.00	0.6	0.300	0.6	0.120	0.5443	1.00	0.5443	0.150	0.0816	4.8
12	12:22	6.50	0.6	0.200	0.6	0.080	0.4898	1.00	0.4898	0.100	0.0490	2.9
13	12:22	7.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 3 Discharge Measurement Summary LRC-1



# Discharge Measurement Summary

Date Generated: Fri Jun 11 2021

File Information				Site Details			
File Name	TG0510.WAD			Site Name	TG		
Start Date and Time	2021/05/10 15:17:25			Operator(s)	SCD		

System Information		Units (English Units)		Discharge Uncertainty		
Sensor Type	FlowTracker	Distance	ft	Category	ISO	Stats
Serial #	P4713	Velocity	ft/s	Accuracy	1.0%	1.0%
CPU Firmware Version	3.9	Area	ft^2	Depth	0.2%	1.1%
Software Ver	2.30	Discharge	cfs	Velocity	0.8%	4.8%
Mounting Correction	0.0%			Width	0.1%	0.1%
				Method	1.8%	-
				# Stations	2.0%	-
				<b>Overall</b>	<b>2.9%</b>	<b>5.0%</b>

Summary			
Averaging Int.	40	# Stations	26
Start Edge	LEW	Total Width	17.000
Mean SNR	27.8 dB	Total Area	13.875
Mean Temp	65.30 °F	Mean Depth	0.816
Disch. Equation	Mid-Section	Mean Velocity	0.0852
		<b>Total Discharge</b>	<b>1.1816</b>

Supplemental Data					
#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon May 10 15:41:18 CDT 2021	17.000	8.990		

Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	15:17	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	15:17	1.00	0.6	0.400	0.6	0.160	-0.0026	1.00	-0.0026	0.400	-0.0010	-0.1
2	15:18	2.00	0.6	0.550	0.6	0.220	0.0479	1.00	0.0479	0.412	0.0198	1.7
3	15:19	2.50	0.6	0.600	0.6	0.240	0.0919	1.00	0.0919	0.300	0.0276	2.3
4	15:20	3.00	0.6	0.750	0.6	0.300	0.0686	1.00	0.0686	0.375	0.0257	2.2
5	15:21	3.50	0.6	0.900	0.6	0.360	0.1194	1.00	0.1194	0.450	0.0537	4.5
6	15:22	4.00	0.6	1.200	0.6	0.480	0.1368	1.00	0.1368	0.600	0.0821	6.9
7	15:23	4.50	0.6	1.200	0.6	0.480	0.1375	1.00	0.1375	0.600	0.0825	7.0
8	15:24	5.00	0.6	1.100	0.6	0.440	0.1542	1.00	0.1542	0.550	0.0848	7.2
9	15:25	5.50	0.6	1.100	0.6	0.440	0.1404	1.00	0.1404	0.550	0.0772	6.5
10	15:26	6.00	0.6	1.000	0.6	0.400	0.1414	1.00	0.1414	0.500	0.0707	6.0
11	15:27	6.50	0.6	1.100	0.6	0.440	0.1175	1.00	0.1175	0.550	0.0646	5.5
12	15:28	7.00	0.6	1.100	0.6	0.440	0.0328	1.00	0.0328	0.550	0.0180	1.5
13	15:29	7.50	0.6	1.100	0.6	0.440	0.0407	1.00	0.0407	0.550	0.0224	1.9
14	15:30	8.00	0.6	1.100	0.6	0.440	0.1040	1.00	0.1040	0.550	0.0572	4.8
15	15:31	8.50	0.6	1.050	0.6	0.420	0.1138	1.00	0.1138	0.525	0.0598	5.1
16	15:32	9.00	0.6	0.950	0.6	0.380	0.0853	1.00	0.0853	0.475	0.0405	3.4
17	15:33	9.50	0.6	0.900	0.6	0.360	0.0676	1.00	0.0676	0.450	0.0304	2.6
18	15:34	10.00	0.6	0.850	0.6	0.340	0.1047	1.00	0.1047	0.638	0.0667	5.6
19	15:35	11.00	0.6	0.800	0.6	0.320	0.1060	1.00	0.1060	0.800	0.0848	7.2
20	15:36	12.00	0.6	0.800	0.6	0.320	0.0846	1.00	0.0846	0.800	0.0677	5.7
21	15:37	13.00	0.6	0.800	0.6	0.320	0.0768	1.00	0.0768	0.800	0.0614	5.2
22	15:38	14.00	0.6	0.850	0.6	0.340	0.0853	1.00	0.0853	0.850	0.0725	6.1
23	15:39	15.00	0.6	0.900	0.6	0.360	0.0141	1.00	0.0141	0.900	0.0127	1.1
24	15:40	16.00	0.6	0.700	0.6	0.280	-0.0003	1.00	-0.0003	0.700	-0.0002	0.0
25	15:40	17.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 4 Discharge Measurement Summary TG-1

# Discharge Measurement Summary

Date Generated: Fri Jun 11 2021

File Information		Site Details	
File Name	UDB0510.WAD	Site Name	UDB
Start Date and Time	2021/05/10 08:14:25	Operator(s)	SCD

System Information		Units (English Units)		Discharge Uncertainty		
Sensor Type	FlowTracker	Distance	ft	Category	ISO	Stats
Serial #	P4713	Velocity	ft/s	Accuracy	1.0%	1.0%
CPU Firmware Version	3.9	Area	ft^2	Depth	0.1%	2.1%
Software Ver	2.30	Discharge	cfs	Velocity	1.4%	3.6%
Mounting Correction	0.0%			Width	0.1%	0.1%
				Method	2.1%	-
				# Stations	2.0%	-
				<b>Overall</b>	<b>3.4%</b>	<b>4.3%</b>

Summary			
Averaging Int.	40	# Stations	25
Start Edge	LEW	Total Width	16.000
Mean SNR	30.4 dB	Total Area	14.775
Mean Temp	58.00 °F	Mean Depth	0.923
Disch. Equation	Mid-Section	Mean Velocity	0.1598
		<b>Total Discharge</b>	<b>2.3610</b>

Supplemental Data					
#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon May 10 08:37:53 CDT 2021	16.000	17.470		

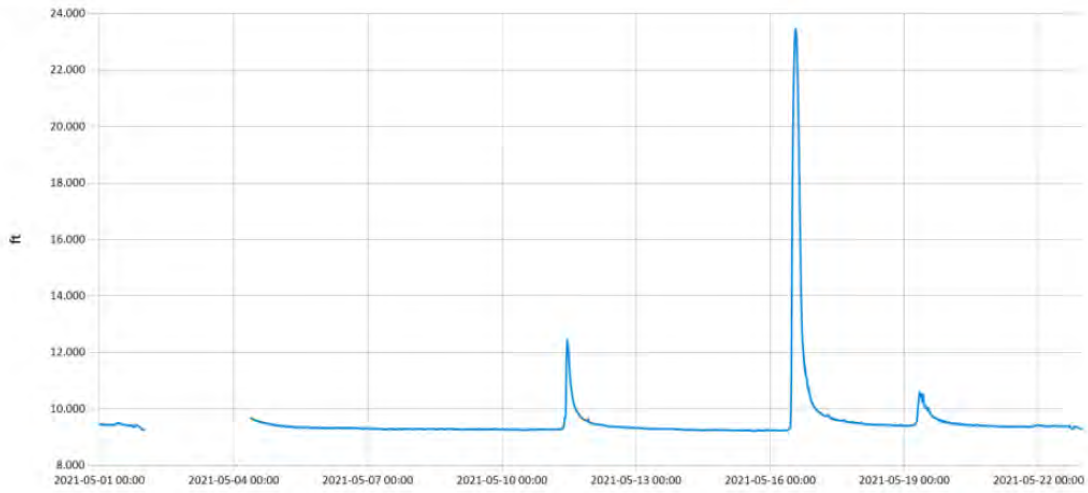
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	08:14	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
<i>1</i>	<i>08:14</i>	<i>1.00</i>	<i>0.6</i>	<i>0.400</i>	<i>0.6</i>	<i>0.160</i>	<i>-0.0502</i>	<i>1.00</i>	<i>-0.0502</i>	<i>0.400</i>	<i>-0.0201</i>	<i>-0.9</i>
<i>2</i>	<i>08:15</i>	<i>2.00</i>	<i>0.6</i>	<i>0.750</i>	<i>0.6</i>	<i>0.300</i>	<i>0.0512</i>	<i>1.00</i>	<i>0.0512</i>	<i>0.563</i>	<i>0.0288</i>	<i>1.2</i>
<i>3</i>	<i>08:16</i>	<i>2.50</i>	<i>0.6</i>	<i>1.000</i>	<i>0.6</i>	<i>0.400</i>	<i>0.0226</i>	<i>1.00</i>	<i>0.0226</i>	<i>0.500</i>	<i>0.0113</i>	<i>0.5</i>
<i>4</i>	<i>08:17</i>	<i>3.00</i>	<i>0.6</i>	<i>1.000</i>	<i>0.6</i>	<i>0.400</i>	<i>0.0830</i>	<i>1.00</i>	<i>0.0830</i>	<i>0.500</i>	<i>0.0415</i>	<i>1.8</i>
5	08:18	3.50	0.6	1.200	0.6	0.480	0.0879	1.00	0.0879	0.600	0.0528	2.2
6	08:19	4.00	0.6	1.100	0.6	0.440	0.1014	1.00	0.1014	0.550	0.0558	2.4
<i>7</i>	<i>08:20</i>	<i>4.50</i>	<i>0.6</i>	<i>1.100</i>	<i>0.6</i>	<i>0.440</i>	<i>0.1467</i>	<i>1.00</i>	<i>0.1467</i>	<i>0.550</i>	<i>0.0807</i>	<i>3.4</i>
8	08:21	5.00	0.6	1.300	0.6	0.520	0.1355	1.00	0.1355	0.650	0.0881	3.7
9	08:22	5.50	0.6	1.100	0.6	0.440	0.2667	1.00	0.2667	0.550	0.1467	6.2
10	08:23	6.00	0.6	1.100	0.6	0.440	0.3392	1.00	0.3392	0.550	0.1866	7.9
11	08:24	6.50	0.6	1.350	0.6	0.540	0.3799	1.00	0.3799	0.675	0.2565	10.9
12	08:25	7.00	0.6	1.350	0.6	0.540	0.3940	1.00	0.3940	0.675	0.2660	11.3
13	08:26	7.50	0.6	1.550	0.6	0.620	0.3556	1.00	0.3556	0.775	0.2756	11.7
14	08:27	8.00	0.6	1.300	0.6	0.520	0.3510	1.00	0.3510	0.650	0.2282	9.7
15	08:28	8.50	0.6	1.400	0.6	0.560	0.2461	1.00	0.2461	0.700	0.1722	7.3
16	08:29	9.00	0.6	1.300	0.6	0.520	0.1952	1.00	0.1952	0.650	0.1269	5.4
17	08:30	9.50	0.6	1.000	0.6	0.400	0.0971	1.00	0.0971	0.500	0.0486	2.1
<i>18</i>	<i>08:31</i>	<i>10.00</i>	<i>0.6</i>	<i>1.050</i>	<i>0.6</i>	<i>0.420</i>	<i>0.1230</i>	<i>1.00</i>	<i>0.1230</i>	<i>0.787</i>	<i>0.0969</i>	<i>4.1</i>
19	08:32	11.00	0.6	1.050	0.6	0.420	0.1204	1.00	0.1204	1.050	0.1264	5.4
20	08:33	12.00	0.6	0.900	0.6	0.360	0.0768	1.00	0.0768	0.900	0.0691	2.9
21	08:34	13.00	0.6	0.700	0.6	0.280	0.0292	1.00	0.0292	0.700	0.0204	0.9
<i>22</i>	<i>08:35</i>	<i>14.00</i>	<i>0.6</i>	<i>0.700</i>	<i>0.6</i>	<i>0.280</i>	<i>0.0220</i>	<i>1.00</i>	<i>0.0220</i>	<i>0.700</i>	<i>0.0154</i>	<i>0.7</i>
<i>23</i>	<i>08:36</i>	<i>15.00</i>	<i>0.6</i>	<i>0.600</i>	<i>0.6</i>	<i>0.240</i>	<i>-0.0220</i>	<i>1.00</i>	<i>-0.0220</i>	<i>0.600</i>	<i>-0.0132</i>	<i>-0.6</i>
24	08:36	16.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 5 Discharge Measurement Summary UDB-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59

UTC Offset: -06:00

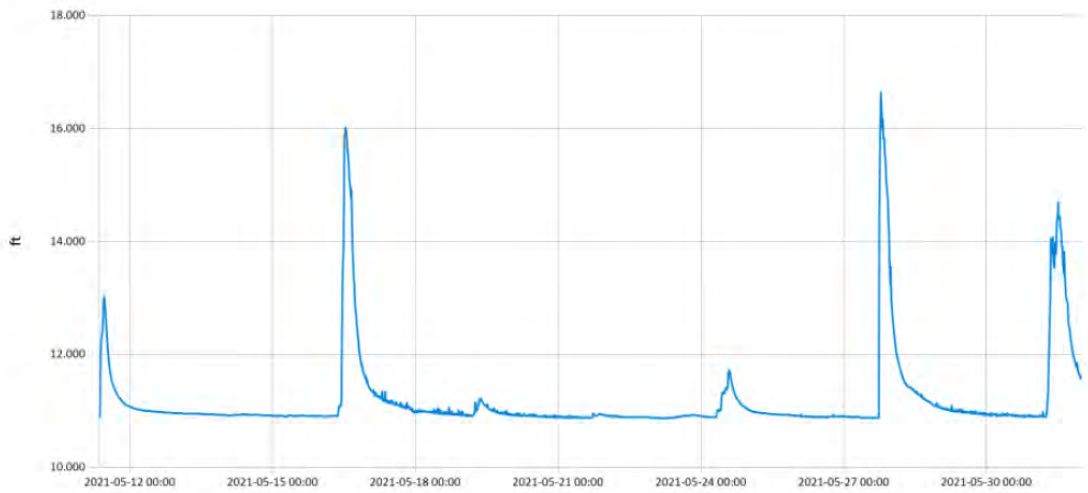


— Stage@TG

Figure 6 Monthly Hydrograph TG-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59

UTC Offset: -06:00



— Stage@TE

Figure 7 Monthly Hydrograph TE-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59 UTC Offset: -06:00

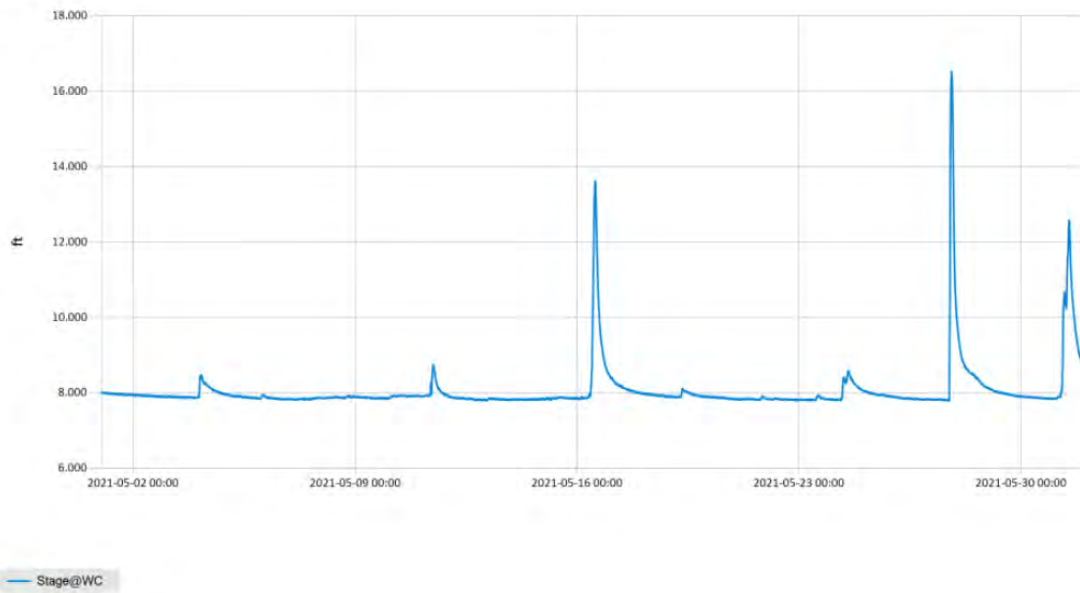


Figure 8 Monthly Hydrograph WC-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59 UTC Offset: -06:00

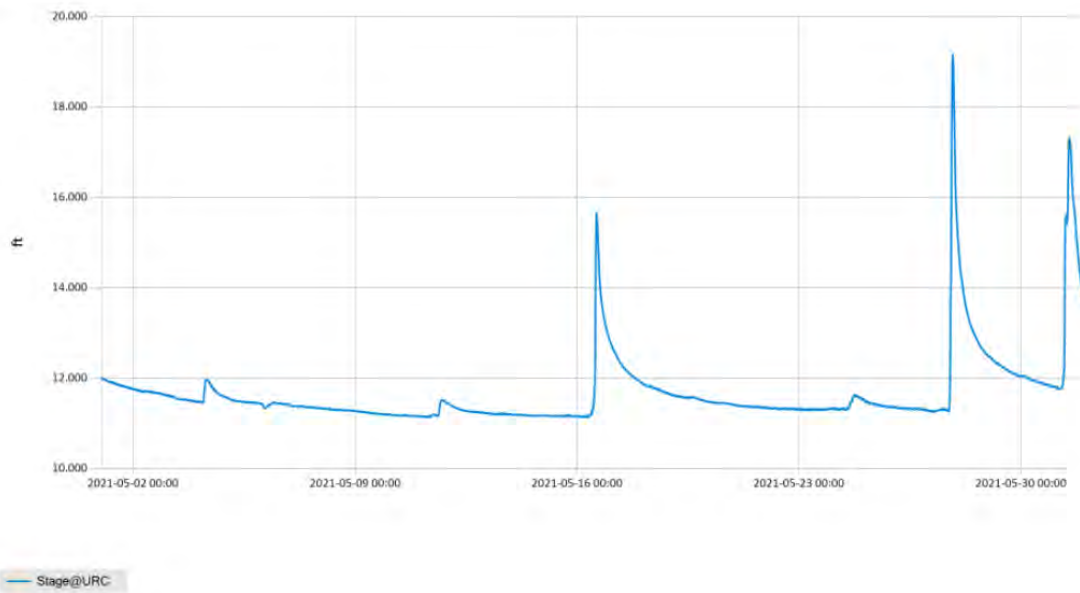


Figure 9 Monthly Hydrograph URC-2

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59 UTC Offset: -06:00

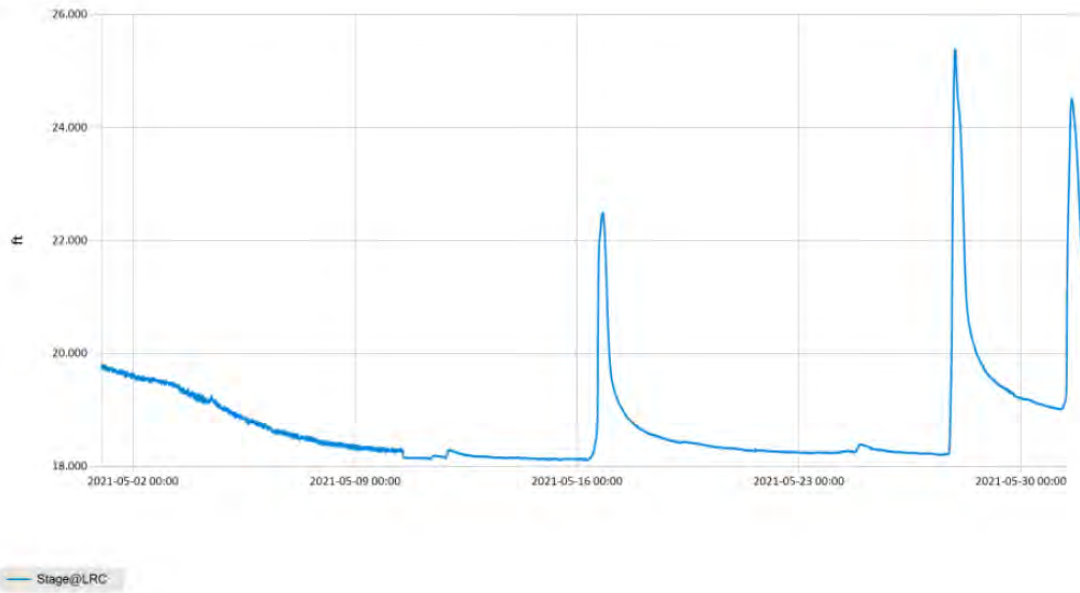


Figure 10 Monthly Hydrograph LRC-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59 UTC Offset: -06:00

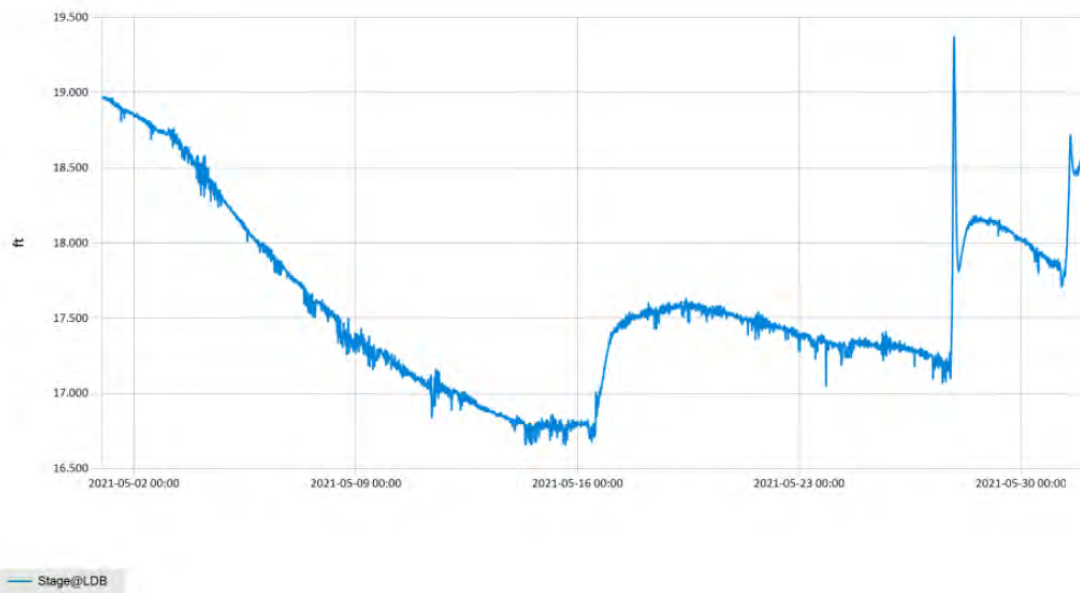
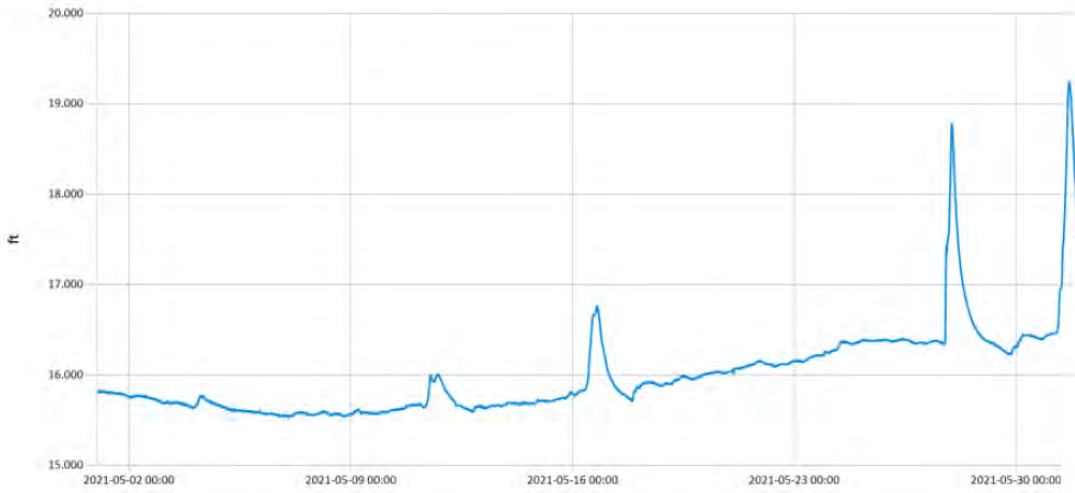


Figure 11 Monthly Hydrograph LDB-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59

UTC Offset: -06:00

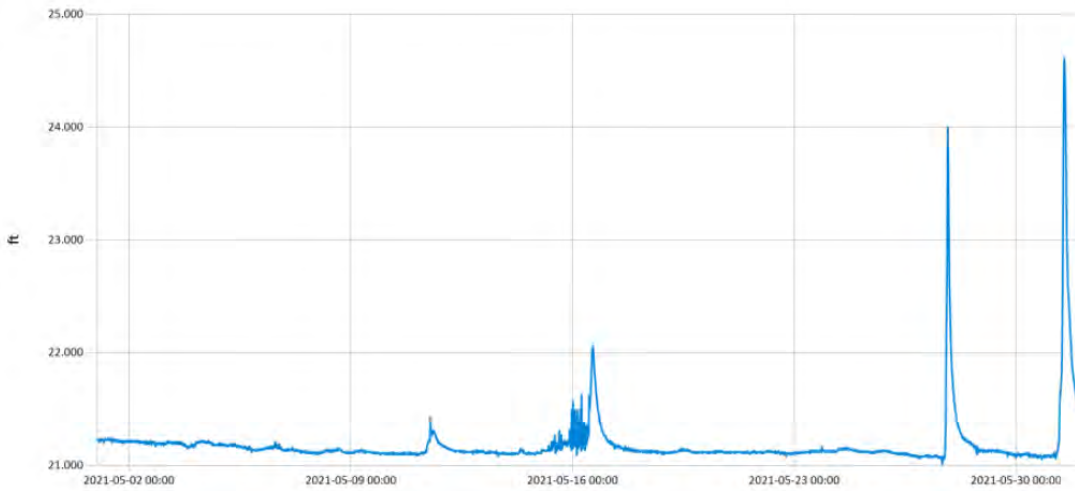


Stage@JB

Figure 12 Monthly Hydrograph JB-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59

UTC Offset: -06:00



Stage@CC

Figure 13 Monthly Hydrograph CC-1

Period Selected: 2021-05-01 00:00 - 2021-05-31 23:59 UTC Offset: -06:00

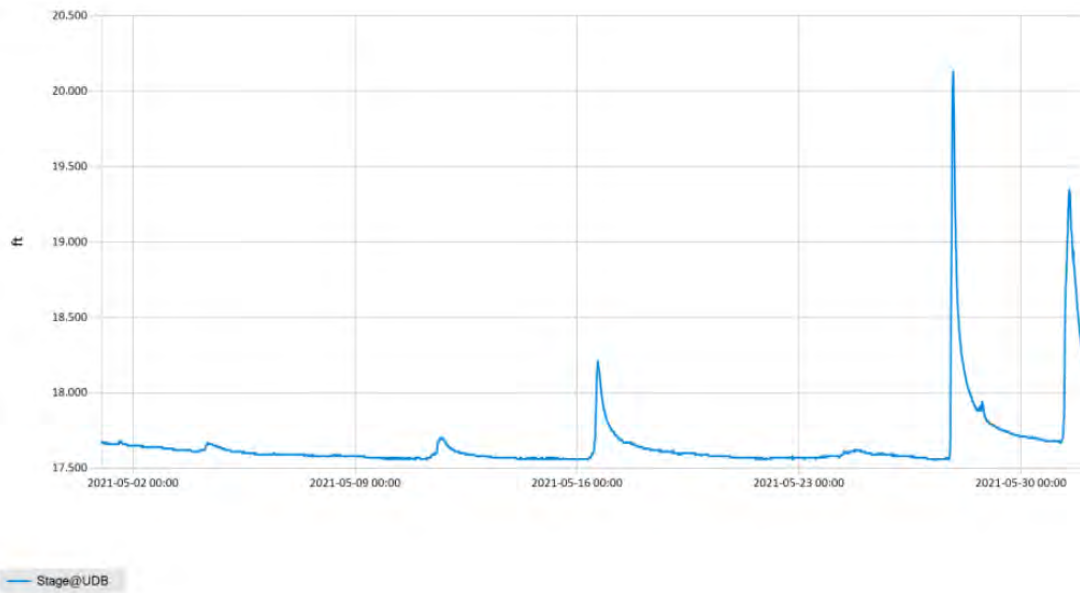


Figure 14 Monthly Hydrograph UDB-1

MESONET CLIMATOLOGICAL DATA SUMMARY					May 2021					Time Zone: Midnight-Midnight CST											
(NRMN) Norman					Nearest City: 2.1 NW Norman					County: Cleveland											
Latitude: 35-14-09					Longitude: 97-27-53					Elevation: 1171 feet											
DAY	TEMPERATURE ( °F )				DEG DAYS		HUMIDITY (%)			RAIN		PRESSURE (in)			WIND SPEED (mph)		SOLAR (MJ/m <sup>2</sup> )	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	71	55	64.2	59.1	2	0	97	72	84	0.00	28.72	29.97	SSE	7.0	19.6	11.36	61.2	64.4	68	61	
2	77	61	67.8	61.0	0	4	98	58	80	0.00	28.36	29.60	SSE	8.4	22.0	15.62	62.7	65.6	70	62	
3	76	62	68.7	61.3	0	4	97	60	78	0.00	28.36	29.60	N	12.7	32.7	15.57	63.8	66.0	70	63	
4	66*	48*	58.2*	48.3*	8*	0*	93*	43*	72*	0.52*	28.73*	29.97*	N	12.1*	30.9*	NA	61.9*	64.0*	68*	61*	
5	73	42	60.4	41.6	7	0	97	27	55	0.05	28.90	30.15	S	3.6	13.5	28.24	60.1	63.4	72	55	
6	77	55	65.7	49.7	0	1	89	31	59	0.00	28.97	30.22	NNW	7.3	21.5	27.62	62.4	65.0	71	60	
7	80	54	68.1	50.0	0	2	69	41	53	0.00	28.82	30.07	SSE	10.5	26.2	27.55	62.8	63.6	70	57	
8	83	65	74.9	60.5	0	9	76	48	62	0.00	28.48	29.72	S	14.8	34.3	25.10	65.1	67.3	73	62	
9	76	53	61.4	50.7	0	0	78	55	68	0.00	28.64	29.88	NNE	16.2	34.3	25.50	65.0	68.1	74	63	
10	66	51	57.4	47.2	6	0	83	54	69	0.00	28.82	30.07	NE	10.6	22.9	16.64	62.5	65.0	71	60	
11	58	51	52.8	47.9	10	0	97	72	83	0.45	28.87	30.12	NE	11.1	25.1	6.34	60.4	60.4	64	57	
12	67	52	57.7	48.2	6	0	86	54	71	0.00	29.03	30.29	NE	7.8	17.9	15.69	60.0	59.6	65	56	
13	72	45	59.9	46.0	7	0	98	38	64	0.00	29.04	30.30	SSE	3.5	14.4	25.86	60.7	61.6	70	53	
14	73	53	64.1	51.6	2	0	85	51	65	0.00	28.91	30.16	SSE	10.1	29.1	22.68	61.7	63.8	71	57	
15	78	60	69.6	58.9	0	4	76	60	69	0.00	28.79	30.04	SSE	10.0	27.7	19.41	63.4	67.9	75	61	
16	69	61	65.3	62.6	0	0	97	76	91	2.08	28.70	29.94	SSE	6.7	24.5	3.70	63.9	65.9	69	65	
17	75	60	67.0	62.7	0	3	99	68	87	0.00	28.63	29.87	ENE	3.5	14.5	11.33	64.2	66.6	72	63	
18	74	63	68.0	61.4	0	3	95	57	80	0.00	28.63	29.87	SE	7.3	21.4	12.60	65.0	68.1	71	65	
19	77	63	68.7	63.4	0	5	98	59	85	0.14	28.65	29.90	ESE	7.8	18.4	19.02	66.1	69.1	75	65	
20	74	65	68.7	63.2	0	5	96	65	83	0.00	28.72	29.96	SE	6.5	18.9	15.59	67.1	70.0	74	67	
21	81*	66*	71.1*	66.7*	0*	8*	95*	62*	87*	0.00*	28.85*	30.10*	SSE*	9.7*	22.4*	NA	67.8*	70.4*	75*	67*	
22	78	68	70.9	67.5	0	8	96	74	89	0.03	28.95	30.21	SE	9.1	20.0	8.44	68.2	70.3	73	69	
23	73	64	68.6	64.8	0	4	97	71	88	0.06	28.91	30.16	SSE	7.1	22.0	8.20	67.8	69.3	71	67	
24	71	65	67.4	64.3	0	3	98	77	90	0.34	28.82	30.07	SSE	8.0	27.6	6.21	66.7	67.5	70	66	
25	76	66	70.4	66.4	0	6	97	68	87	0.02	28.75	30.00	SSE	6.6	18.5	10.08	67.2	69.4	73	67	
26	86	64	75.3	70.1	0	10	99	66	85	0.00	28.80	30.05	SSE	7.5	22.7	18.45	68.9	72.0	78	67	
27	86	66	75.0	69.6	0	11	98	65	84	1.71	28.68	29.92	S	11.2	36.7	19.53	71.2	74.0	79	71	
28	74	60	66.2	57.8	0	2	97	53	76	0.00	28.80	30.05	NNE	7.9	21.9	26.01	70.0	72.6	78	68	
29	74	54	63.4	53.5	1	0	90	53	71	0.00	28.84	30.09	ENE	8.5	20.1	29.29	69.6	71.2	78	65	
30	76	54	64.6	57.8	0	0	92	64	79	0.00	28.88	30.13	SE	7.8	18.3	19.37	69.4	68.9	74	64	
31	63	58	60.7	59.2	4	0	98	87	95	1.42	28.84	30.09	ESE	9.2	21.9	3.24	67.2	65.4	68	64	
<b>&lt;- Monthly Averages -&gt;</b>										28.77* 30.02*		SSE* 8.7* 36.7*		17.04*	65.0* 67.0* 72* 63*						
Temperature - Highest: 86*					Degree Days - Total HDD: 54*					Number of Days With:											
Lowest: 42*					Total CDD: 92*					Tmax ≥ 90: 0*					Rainfall ≥ 0.01 inch: 11*						
Rainfall: Monthly Total: 6.82* in.					Humidity - Highest: 99*					Tmax ≤ 32: 0*					Rainfall ≥ 0.10 inch: 7*						
Greatest 24 Hr: 2.08* in.					Lowest: 27*					Tmin ≤ 32: 0*					Avg Wind Speed ≥ 10 mph: 10*						
										Tmin ≤ 0: 0*					Max Wind Speed ≥ 30 mph: 5*						

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\* Denotes incomplete record

Figure 15 May Mesonet Data