STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Jan	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	25	16	M	M	M	M													
2	31	17	M	M	M	M													
3	31	20	20	0.95	M	2													12 day precip accum
4	20	-6	-6	0.00	0.0	2													
5	3	-7	-7	0.00	0.0	2													
6	1	-9	-9	0.00	0.0	2													
7	4	-12	M	0.00	0.0	2													
8	9	-5	M	0.00	0.0	2													
9	17	-8	16	0.00	0.0	2													
10	26	15	26	0.10	2.0	4													
11	27	3	5	0.15	4.0	8													
12	9	3	3	T	0.0	8													
13	13	-6	-6	0.00	0.0	M													
14	7	-10	M	M	M	M													
15	21	-1	M	M	M	M													
16	31	-2	M	M	M	M													
17	31	10	30	0.50	2.5	5													4 day precip and snowfall accum
18	33	27	27	0.00	0.0	5													
19	38	24	29	0.00	0.0	4													
20	37	29	33	0.10	0.0	4													
21	37	33	M	M	M	M													
22	36	32	M	M	M	M													
23	38	32	32	0.05	0.0	1													3 day precip accum
24	33	31	31	0.00	0.0	0													
25	32	30	30	0.12	3.0	3													
26	31	27	27	T	T	3													
27	28	22	22	0.00	0.0	3													
28	29	14	M	M	M	M													
29	27	22	M	M	M	M													
30	28	10	21	T	0.0	3													3 day precip accum
31	40	9	32	0.07	0.0	3													
	24.9	11.6	SUM	2.04	11.5				Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) NORMAL CHECK BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Feb	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	38	14	14	0.03	0.0	1													The At Observation temp was 14 but I wasn't allo
2	29	7	7	0.00	0.0	1													AT OBSN TEMP WAS 7 BUT I WAS UNABLE TO ENTER AS
3	17	5	6	0.00	0.0	1													
4	23	6	M	0.00	0.0	1													
5	34	17	M	0.00	0.0	1													
6	27	16	17	0.00	0.0	1													
7	33	17	25	0.00	0.0	1													
8	25	1	1	0.00	0.0	1													
9	14	1	4	0.00	0.0	1													
10	21	2	21	0.00	0.0	1													
11	42	21	M	M	M	M													
12	42	28	M	M	M	M													
13	37	26	29	0.00	0.0	0													
14	45	28	30	0.00	0.0	0													
15	41	19	19	0.00	0.0	0													
16	34	19	28	0.00	0.0	0													
17	40	28	31	0.00	0.0	0													
18	57	31	M	M	M														
19	56	30	M	M	M	0													
20	57	34	48	0.00	0.0	0													
21	52	30	31	0.60	0.0	0													
22	60	30	39	0.00	0.0	0													
23	58	31	31	0.00	0.0	0													
24	37	24	24	T	0.0	0													
25	25	13	M	M	M	M													
26	32	14	M	M	M	M													
27	38	22	26	0.00	0.0	0													
28	41	26	36	0.00	0.0	0													
29																			
30																			
31																			
	37.7	19.3	SUM	0.63					Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Mar	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	46	24	25	0.07	1.5	2													
2	36	17	18	0.00	0.0	0													
3	29	12	14	0.00	0.0	0													
4	29	13	M	M	M	M													
5	40	25	M	M	M	M													
6	52	39	50	0.00	0.0	0													
7	64	27	31	0.10	0.0	0													
8	48	25	25	0.00	0.0	0													
9	34	23	23	0.00	0.0	0													
10	30	4	5	0.00	0.0	0													
11	30	4	M	M	M	M													
12	17	5	M	M	M	M	1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
13	19	8	13	0.28	4.5	5													
14	22	8	8	0.00	0.0	2													
15	26	4	7	0.00	0.0	1													
16	27	5	17	0.00	0.0	0													
17	29	12	M	M	M	M													
18	39	22	M	M	M	M													
19	43	29	M	M	M	M													
20	42	28	41	0.00	0.0	0													
21	53	28	28	0.00	0.0	0													
22	36	18	20	0.00	0.0	0	1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											Had to re-set Nimbus due to incorrect time. Temp
23	40	20	35	0.00	0.0	0													
24	38	35	37	0.04	0.0	0													
25	44	36	M	M	0.0	0													
26	41	34	M	M	0.0	0													
27	42	34	36	0.05	0.0	0													3-day precip accumulation
28	54	30	34	0.00	0.0	0													
29	63	32	41	0.00	0.0	0													
30	48	36	37	0.09	0.0	0													
31	45	31	37	0.00	0.0	0													Reading taken at 10:00 today
	38.9	21.5	SUM	0.63	6.0				Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		May	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	46	36	37	0.86															
2	41	33	41	0.32	0.0	0													
3	60	39	48	0.00															
4	66	41	50	0.00															
5	68	39	51	0.00															
6	77	43	M	M															
7	67	46	M	M															
8	67	44	49	0.00															
9	71	49	52	0.06															
10	71	47	58	0.00															
11	67	45	50	0.00															
12	66	41	54	0.00															
13	76	53	M	M															
14	81	53	M	M															
15	88	58	60	0.00															
16	70	59	64	1.70															
17	81	60	62	0.46															
18	70	46	47	1.95															
19	53	41	42	0.03															
20	53	42	M	M															
21	50	40	M	M															
22	50	42	50	1.50	0.0	0													3-day precip accumulation
23	66	49	50	0.08															
24	58	45	48	0.05															
25	63	46	55	0.00															
26	71	54	61	0.02															
27	79	52	M	M															
28	71	52	M	M															
29	73	52	M	M															
30	66	50	54	0.15															4 day precip accum
31	60	46	56	0.00															
	66.0	46.5	SUM	7.18			CHECK BAR (for wire weight) NORMAL CHECK BAR		Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CONDITION OF RIVER AT GAGE

READING	DATE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Jun	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	74	46	58	0.00															
2	80	51	66	0.00															
3	91	64	M	M															
4	91	58	M	M															
5	89	58	64	0.07															
6	81	54	64	0.00															
7	81	55	65	0.00															
8	88	64	69	0.05															
9	83	62	67	0.00															
10	87	67	M	M															
11	97	72	M	M															
12	74	62	66	1.15			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
13	81	65	69	0.35															
14	90	63	68	0.20															
15	82	62	70	0.00															
16	82	60	73	0.00															
17	84	60	M	M															
18	84	57	M	M															
19	73	58	63	0.24															
20	73	57	58	0.22															
21	75	54	63	0.03															
22	80	54	67	0.06			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
23	72	55	62	0.24															
24	71	54	M	M															
25	65	51	M	M															
26	69	50	55	0.00															
27	70	48	61	0.00															
28	77	47	64	0.88															
29	83	59	65	0.11															
30	75	62	66	0.00															
31																			
	80.1	57.6	SUM	3.60															
							Fog	Ice pel	Glaze	Thund	Hail	Dam winds							

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Jul	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON	P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	80	60	M	M																
2	75	59	M	M																
3	79	58	66	0.07	0.0	0														3-day precip accumulation
4	82	56	M	0.00																
5	86	62	74	0.00																
6	91	67	74	0.00																
7	93	69	70	0.00																
8	83	57	M	M																
9	82	54	M	M																
10	85	56	67	0.26																3-day precip total
11	85	64	71	0.00																
12	86	60	74	0.00																
13	88	59	59	0.00																
14	68	56	56	0.00																
15	75	56	M	0.00																
16	93	65	M	0.00																
17	85	62	70	0.00																
18	90	68	76	0.25																
19	82	56	66	0.05																
20	81	65	69	3.25																
21	86	65	69	0.00																
22	82	67	M	0.00																
23	88	66	M	0.00																
24	77	57	62	0.00																
25	79	62	65	0.05																
26	84	64	68	1.53																
27	82	63	70	0.00																
28	84	62	68	0.00																
29	83	56	M	0.00																
30	83	58	M	0.00																
31	84	62	68	0.00																
	83.3	61.0	SUM	5.46																

CHECK BAR (for wire weight) NORMAL CHECK BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Aug	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	85	60	67	0.00															
2	86	64	67	0.00															
3	82	63	65	0.48															
4	65	52	55	0.05															
5	76	51	M	M															
6	76	56	M	M															
7	75	51	60	0.11															3 day precip accum
8	79	55	64	0.00															
9	80	56	62	0.00															
10	67	57	60	0.54															
11	74	56	60	0.00															
12	78	50	M	M			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
13	78	53	M	M															
14	72	59	62	0.83															3 day precip accum
15	74	55	57	0.00															
16	75	57	64	0.56															
17	77	64	66	0.93															
18	74	56	63	0.05															
19	73	52	M	M															
20	80	58	M	M															
21	83	64	64	0.20															3 day precip accum
22	78	59	60	0.27			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
23	73	52	57	0.00															
24	74	56	58	0.02															
25	71	55	56	0.25															
26	71	55	M	M															
27	68	59	M	M															
28	73	60	61	0.77															3 day precip accum
29	72	53	59	0.00															
30	78	56	64	0.00															
31	81	54	55	0.01	0.0	0													
	75.7	56.4	SUM	5.07					Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Sep	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	70	48	51	0.00															
2	72	50	M	M															
3	79	52	M	M															
4	82	59	M	M															
5	74	48	52	0.13															4 day precip accum
6	63	45	50	0.02															
7	66	43	48	0.00															
8	74	48	52	0.00															
9	68	49	M	M															
10	76	52	M	M															
11	80	55	58	0.00															3 day precip accum
12	81	54	59	0.00															
13	85	58	62	0.00															
14	86	61	63	0.00															
15	90	63	65	0.00															
16	84	65	M	M															
17	76	50	M	M															
18	66	47	53	T															3 day precip accum
19	57	53	57	0.57															
20	80	57	69	0.35															
21	74	46	54	0.00															
22	84	52	74	0.00															
23	93	69	M	M															
24	89	66	M	M															
25	90	60	60	0.35															3 day precip accum
26	63	57	57	0.25															
27	64	46	47	T															
28	64	45	51	0.00															
29	73	45	47	0.00															
30	64	41	M	M															
31																			
	75.6	52.8	SUM	1.67															

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Oct	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	69	42	M	M															
2	62	52	54	0.47															3 day precip accum
3	70	54	63	1.10															
4	70	44	45	0.00															
5	59	40	49	0.00															
6	64	43	47	0.00															
7	58	47	M	M															
8	65	46	M	M															
9	73	45	47	1.02															3 day precip accum
10	56	31	32	0.05															
11	52	32	38	0.00															
12	56	38	54	0.00			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
13	64	45	45	0.00															
14	60	39	M	M															
15	56	40	M	M															
16	52	32	34	0.56															3 day precip accum
17	66	33	42	0.00															
18	74	41	47	0.00	0.0	0													
19	72	36	38	0.00															
20	73	38	55	0.00															
21	77	54	M	M															
22	68	46	M	M			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
23	63	43	47	0.41															3-day precip total
24	60	39	39	0.00															
25	50	31	31	0.00	0.0	0													
26	56	31	46	0.00															
27	55	32	32	0.10															
28	33	29	M	M															
29	33	26	M	M															
30	42	30	35	0.17															3 day precip accum
31	38	27	27	0.00															
	59.5	38.9	SUM	3.88															
							CHECK BAR (for wire weight) NORMAL CHECK BAR		Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CONDITION OF RIVER AT GAGE	READING	DATE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Nov	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	35	23	29	0.00															
2	35	29	34	0.07															
3	39	24	26	0.00															
4	35	26	M	M															
5	42	35	M	M															
6	35	17	23	0.00															3 day precip accum
7	31	18	28	0.00															
8	35	21	26	0.00															
9	42	18	18	0.00															
10	22	9	12	0.00															
11	30	11	M	M															
12	43	23	M	M			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
13	35	22	25	0.00															3 day precip accum
14	46	24	38	T															
15	45	37	37	0.00															
16	37	26	28	0.00															
17	36	27	35	0.00															
18	36	31	M	M															
19	36	12	M	M															
20	40	15	29	0.00															3 day precip accum
21	45	25	25	0.00															
22	28	9	12	0.00			1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11											
23	31	11	M	M															
24	45	19	M	M															
25	60	30	M	M															
26	40	19	M	M															
27	49	26	34	0.00															5 day precip accum
28	59	34	43	0.00															
29	52	19	22	0.00															
30	46	22	35	0.00															
31																			
	39.7	22.1	SUM	0.07					Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
MPX Twin Cities/Chanhassen

STATION INDEX NO.
21-7107-09

STATION (Climatological)	(River Station, if different)	MONTH	
Rosemount Research and Outreach Center		Dec	2017

STATE	COUNTY	RIVER
MN	Dakota	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

WS FORM B-91
(03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved A.M. 1 2 3 4 5 6 7 8 9 10 11	NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	46	23	30	0.00															
2	52	22	M	M															
3	48	23	M	M															
4	52	31	52	0.00															3 day precip accum
5	59	14	14	0.22	3.0	5													Lots of drifting and blowing snow around snow bo
6	20	14	15	0.00	0.0	3													
7	19	4	5	T	0.0	3													
8	21	5	18	0.00	0.0	3													
9	30	18	M	M	M	M													
10	24	16	M	M	M	M													
11	29	17	29	0.08	1.0	4													
12	34	5	5	0.00	0.0	4													
13	29	5	27	0.00	0.0	4													
14	27	6	7	T	0.0	4													
15	22	6	18	T	0.0	4													
16	28	18	M	M	M	M													
17	28	16	M	M	M	M													
18	26	21	25	0.03	T	3													
19	39	24	30	0.00	0.0	2													
20	34	17	17	0.00	0.0	1													
21	19	16	19	0.00	0.0	1													
22	23	17	18	0.00	0.0	0													
23	25	6	M	M	M	M													
24	22	6	M	M	M	M													
25	22	-1	M	M	M	M													
26	0	-10	M	M	M	M													
27	0	-14	M	M	M	M													
28	7	-13	M	M	M	M													
29	10	-3	M	M	M	M													
30	1	-15	M	M	M	M													
31	-7	-15	M	M	M	M													
	25.5	9.0	SUM	0.33	4.0														

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

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STATION INDEX NO.
21-7107-09