STATION *(Climatological)* **Spirit Lake** *(River Station, if different)* | MONTH **Dec** | **2019**

STATE **IA** | COUNTY **Dickinson** | RIVER

TIME *(local)* OF OBSERVATION RIVER | TEMPERATURE **07:00** | PRECIPITATION **07:00** | STANDARD TIME IN USE

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	33	23	M	0.47	T	7	~ ~ ~ ~ ~ ~ ~ – – – –		X	X							Rain, sleet, snow
2	23	7	8	0.00	0.0	7											
3	28	7	17	0.00	0.0	7											
4	35	17	28	0.00	0.0	7											
5	36	27	29	0.00	0.0	6											
6	39	17	17	0.00	0.0	5											
7	23	15	17	0.00	0.0	5											
8	35	17	M	0.00	0.0	4		X									
9	31	12	12	T	T	4	~ ~ – – – – –	X									Light snow/mist
10	21	4	12	0.02	1.2	5	~										Light snow, blowing snow
11	14	-4	-4	0.02	1.7	7	~ ~ ~ ~										Light snow
12	19	-5	19	0.00	0.0	7											
13	19	10	10	0.00	0.0	7											
14	24	10	11	T	T	7	~ ~ ~ ~										Very light snow showers
15	28	11	M	0.00	0.0	7	– – –										
16	31	14	M	T	T	7											Light snow/flurries
17	24	7	M	0.00	0.0	7											
18	23	-1	M	0.00	0.0	7											
19	36	16	M	0.00	0.0	6											
20	31	24	M	0.00	0.0	6											
21	41	27	M	0.00	0.0	4											
22	38	27	M	0.00	0.0	3											
23	37	26	26	0.00	0.0	2											
24	34	26	27	0.00	0.0	2											
25	36	27	M	0.00	0.0	1		X									
26	31	27	27	0.00	0.0	1		X									
27	31	16	16	0.00	0.0	1											
28	37	16	32	0.21	0.0	0	~ ~ ~ ~ ~ – ~ ~	X	X	X							Light rain
29	35	32	M	0.41	0.0	0	~ ~ ~ ~ ~ ~ ~ – – – – – – – – – – – – ~ ~ ~	X	X	X							Rain, sleet, freezing rain
30	33	18	18	0.24	1.4	1	~ ~ ~ ~ ~ ~ – – – –										
31	26	17	23	T	T	1											Occasional light snow showers
	30.1	15.7	SUM	1.37	4.3			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
FSD Sioux Falls

STATION INDEX NO.
13-7859-01