| STATION (Climatological) | (River Station, if different) | MONTH | |
|---|---|---|---|
| Spirit Lake | | Sep | 2021 |

| STATE | COUNTY | RIVER |
|---|---|---|
| IA | Dickinson | |

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

| 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

Draw a straight line ( -------) through hours precipitation was observed, and a wavy line ( ~~~~~ ) through hours precipitation probably occurred unobserved

| 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) | A.M. 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | NOON 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | P.M. | 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 | 58 | 60 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 77 | 60 | 61 | 0.00 | 0.0 | 0 | | | | | | | | | | – | – | – | – | – | – | – | – | – | – | – | ~ | ~ | ~ | | | | | | | | | | | |
| 3 | 64 | 61 | 62 | 1.65 | 0.0 | 0 | ~ | ~ | ~ | ~ | ~ | ~ | – | – | – | | | | | | | | | | | | | | | | | | X | | | | | | | |
| 4 | 68 | 58 | 59 | 0.12 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Light rain |
| 5 | 74 | 59 | 60 | T | 0.0 | 0 | | | | | | | | | | | | | | | | – | | | | | | | | | | | | | | | | | | |
| 6 | 79 | 60 | 63 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 83 | 63 | 67 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 77 | 53 | 53 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 74 | 50 | 50 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 76 | 50 | 56 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 82 | 56 | 63 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | – | | | | | | | | | | | | | | | | | | | | |
| 12 | 84 | 63 | 67 | 0.03 | 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 | | | | | | | | | | | | Light rain |
| 13 | 74 | 61 | M | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | – | – | | | | | | | | | | | | | | | |
| 14 | 72 | 57 | 59 | 0.11 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 70 | 51 | 51 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| 16 | 77 | 49 | 63 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 88 | 57 | 58 | 0.13 | 0.0 | 0 | | | ~ | ~ | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | 50 mph wind gust |
| 18 | 78 | 53 | 54 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | 82 | 54 | 61 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 88 | 61 | 69 | 0.76 | 0.0 | 0 | | | ~ | ~ | ~ | ~ | – | – | – | – | | | | | | | | | | | | | | | | | X | | | | | | | |
| 21 | 70 | 48 | 49 | 0.10 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Light rain |
| 22 | 66 | 41 | 41 | 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 | | | | | | | | | | | | |
| 23 | 69 | 41 | 51 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | 75 | 51 | 52 | 0.00 | 0.0 | 0 | | | | | | | | | | | – | – | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 78 | 52 | 54 | 0.03 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Sprinkles, light rain |
| 26 | 80 | 54 | 55 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | 88 | 55 | 56 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | 85 | 56 | 58 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | 86 | 58 | 61 | 0.00 | 0.0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 77 | 61 | 66 | T | 0.0 | 0 | | | | | | ~ | | | | | | | | | | | | | | | | | | | | | | | | | | | | Sprinkles |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 77.4 | 55.0 | SUM | 2.93 | | | | | | | | | | | | | | | | | | | | | | | | | | 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