

Table F-8 - Regulation Schedule - Pokegama Dam and Reservoir

Regulation Schedule	Condition	Reservoir Elev./Stage in ft.	Operation
<u>1. Routine Operation</u>			
After Labor Day to spring breakup	Winter drawdown	1273.67 to 1270.42 9.25± to 6.0	<p>The Reservoir Regulating Section shall compute the discharge required to lower the pool to spring level, elevation 1270.42 ft. (6.0 ft. stage), before the beginning of the spring breakup, usually about 1 April. Periodic checks of inflow shall be made and outflow adjusted as necessary. If the drawdown is completed before the breakup begins, discharge inflow until the spring runoff starts.</p> <p>Should the level at Days Highlanding recede to elev. 1271.5 ft. during the drawdown period before an elevation of 1270.42 ft. occurs at Pokegama Lake, maintain elev. 1271.5 at Days Highlanding by maintaining an elevation higher than 1270.42 ft. at Pokegama.</p> <p>* The State of Minnesota's plan of operation limits the discharge from Pokegama Reservoir if the elevation is below 1270.42 ft., or below any desired elev. above 1270.42 ft., to the sum of the discharges from Winnibigoshish and Leech Reservoirs; but when Pokegama Reservoir is above the desired elev. the discharge need not be limited by the discharges from Winnibigoshish and Leech Reservoirs.</p>
Spring breakup Period	Storing spring runoff	1270.42 to 1278.42 6.0 to 14.0	The discharges from Pokegama and Sandy Lake Reservoirs shall be regulated so that the ultimate elevations at

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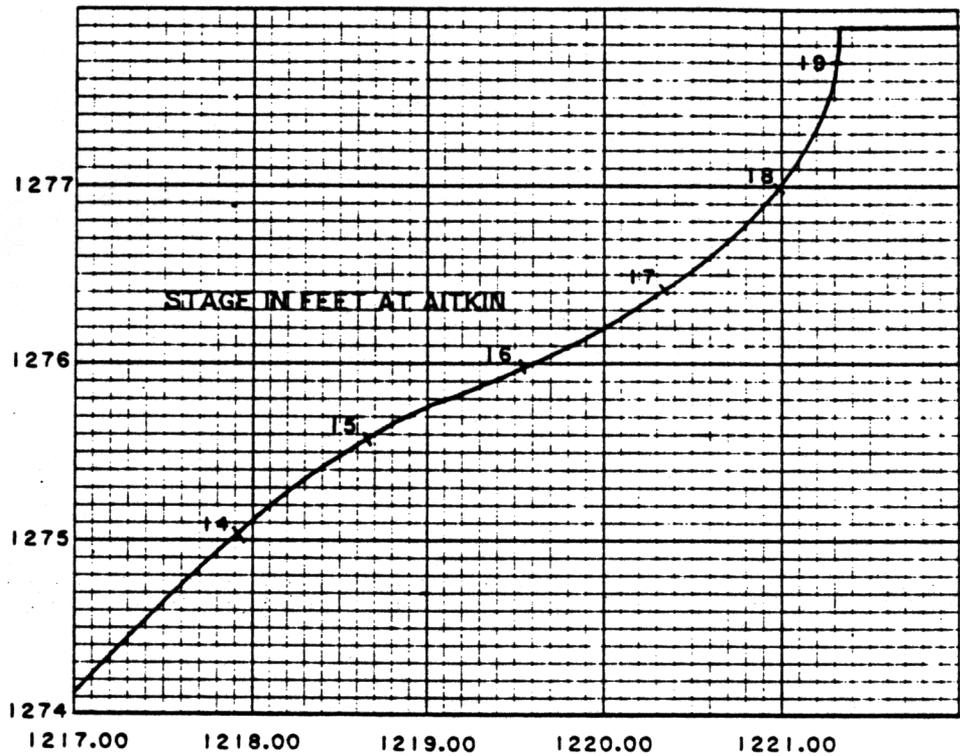
Regulation Schedule	Condition	Reservoir Elev./Stage in ft.	Operation
<u>Routine Operation</u> (Cont.)			
			<p>these two reservoirs and at Aitkin shall result in elevations that correspond to the guide curve for spring floods (see Plate 13). Should the elevation at Pokegama Reservoir reach 1278.42 ft. (14.0 ft. stage), the dam must be completely opened, and open river conditions will exist until the pool drops to elevation 1277.92 ft. (13.5 ft. stage). At this elevation, operation should again be based on the guide curve, if possible.</p> <p>*The State of Minnesota's plan of operation limits the maximum discharge to 5,500 cfs if the reservoir is above the desired maximum elev. of 1276.42 (12.0 ft. stage).</p>
End of spring breakup to about 1 July	Bringing reservoir to desired summer range	1278.42 to (1273.17 - 1273.67) 14.0 to 8.75 - 9.25	<p>On the recession of the inflow) the elevation in Pokegama and Sandy Reservoirs shall be governed by the guide curve, if possible, until the pool has dropped to the desired summer elevation. (There have been only a few times since operation started that these reservoirs have not filled to above the desired summer elevation.)</p>
About 1 July to Labor Day	Normal summer operation	1273.17 - 1273.67 8.75 to 9.25	<p>Regulate the outflow through the sluiceways to maintain pool at the desired summer range, if possible, until winter drawdown begins.</p>

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<u>2. Flood Control</u>			
Summer	Large runoff from intense	1273.17 - 1278.42 8.75 - 14.0	The operation is the same as that for storing the spring runoff during the spring breakup period; except, in the summer months use the guide curve for
Fall	or prolonged rainfall or	1270.42 - 1278.42 6.0 - 14.0	
Winter	winter thaw	1270.42 - 1278.42 6.0 - 14.0	
			summer months (see Plate 14)
			If inflows become so low that the reservoir must be lowered below the desired elevation, so far as practicable, the reservoir shall be maintained above an elev. of 1270.42 ft. (6.0 ft. stage). The flow shall be governed by the Secretary of War's regulation that the average annual discharge shall not be reduced below 200 cfs. If the reservoir is at or below the minimum elev. of 1270.42 ft. (6.0 ft. stage), no discharge other than the minimum specified above shall be permitted except such increased discharge as may specifically be directed by the Chief of Engineers.
<u>3. Water Supply And Conservation</u>			
Drought	Very low inflows	1273.67 to 1270.42 (9.25 to 6.0) or lower if necessary	

\* The State of Minnesota's plan of operation shall be effective only when the reservoirs are not functioning for the primary purpose of navigation and flood cont

POKEGAMA LAKE RESERVOIR  
ELEVATION 1929 ADJ.  
3 DAYS TRAVEL TIME TO AITKIN



SANDY LAKE RESERVOIR  
ELEVATION 1929 ADJ.

**NOTE:**

Curve shows relation between maximum reservoir stages and corresponding peak flood stage on the Mississippi River at Aitkin which, under operating procedures now in effect, will result (on the average) in the minimum total flood damages to affected interests in the three principal damage areas.

AITKIN GAGE ZERO = 1182.41  
POKEGAMA GAGE ZERO = 1264.42  
SANDY GAGE ZERO = 1207.31

1 DAY TRAVEL TIME TO AITKIN  
FROM SANDY LAKE

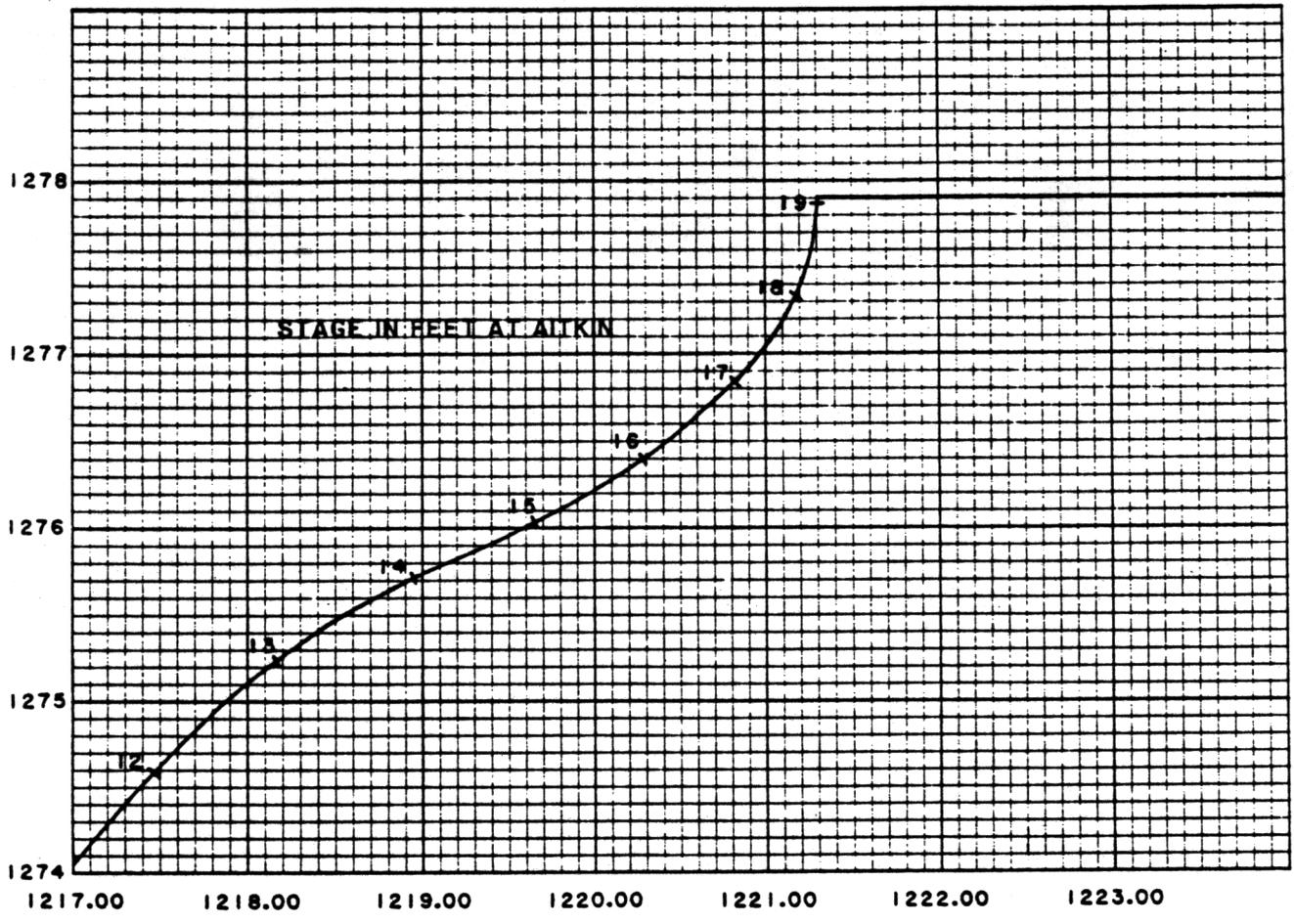
3 DAYS TRAVEL TIME TO AITKIN  
FROM POKEGAMA RESERVOIR

MISSISSIPPI RIVER HEADWATERS  
NAVIGATION AND FLOOD CONTROL PROJECT  
RESERVOIR REGULATION MANUAL

**SPRING FLOOD GUIDE CURVE  
(MARCH-15 MAY)**

CORPS OF ENGINEERS, U.S. ARMY  
ST. PAUL ENGINEERING DISTRICT  
ST. PAUL, MINNESOTA

POKEGAMA LAKE RESERVOIR  
ELEVATION 1929 ADJ.



SANDY LAKE RESERVOIR  
ELEVATION 1929 ADJ.

**NOTE:**

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1 DAY TRAVEL TIME TO AITKIN  
FROM SANDY LAKE

3 DAYS TRAVEL TIME TO AITKIN  
FROM POKEGAMA RESERVOIR

MISSISSIPPI RIVER HEADWATERS  
NAVIGATION AND FLOOD CONTROL PROJECT  
RESERVOIR REGULATION MANUAL

**SUMMER FLOOD GUIDE CURVE  
(15 MAY-SEPT)**

CORPS OF ENGINEERS, U.S. ARMY  
ST. PAUL ENGINEERING DISTRICT  
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