

**LEGEND**

EMERGENT VEGETATION	EK
SUBMERGED VEGETATION	SK
FLOATING-LEAF VEGETATION	FL
STREAM	
INTERMITTENT STREAM	
OPEN WATER	O.W.
MARSH	
BRUSH SWAMP	
GRAVEL ROAD	
UNIMPROVED ROAD	
COUNTY ROAD	
COUNTY STATE AID HIGHWAY	
NATIONAL FOREST DEVELOPMENT	N.F.D.
SECTION LINE	---
SECTION NUMBER	5
TOWNSHIP LINE	---
TOWNSHIP NUMBER	T.58N.
RANGE LINE	---
RANGE NUMBER	R.24W.
NATIONAL FOREST BOUNDARY	
STATE FOREST BOUNDARY	
BENCHMARK	B.M. ⊕
WILD RICE	W.R.
BRIDGE	

**BALSAM LAKE (31-259)**

PLANIMETERED AREA	710 ACRES
LITTORAL AREA	295.6 ACRES (41.6%)
MEDIAN DEPTH	17 FEET
LENGTH OF SHORELINE	10.1 MILES
LENGTH OF ISLAND SHORELINE	0.1 MILES

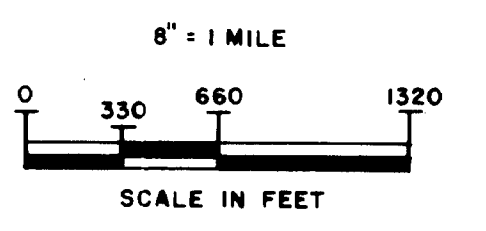
**UNNAMED (MUNSON BAY PUGHOLE) LAKE (31-279)**

PLANIMETERED AREA	25.5 ACRES
LITTORAL AREA	25.5 ACRES (100%)
MEDIAN DEPTH	6 FEET
LENGTH OF SHORELINE	0.9 MILES

LAKE OUTLINES FROM 1977 BLUELINE PHOTO, SHEET NO. 325-3

B.M.1 - SPIKE IN 5" D.B.H. WILLOW TREE, 30' WEST OF PUBLIC ACCESS, 1' FROM WATER'S EDGE.  
W.S.E. = 4.7' BELOW B.M.1

B.M.2 - SPIKE IN 3" D.B.H. ASPEN TREE, 50' EAST OF PUBLIC ACCESS, 9' FROM WATER'S EDGE.  
W.S.E. = 6.15' BELOW B.M.2



REPRODUCTION OF THIS MAP REQUIRES PROPER CREDITS TO: DIVISION OF FISH AND WILDLIFE, MINNESOTA DEPARTMENT OF NATURAL RESOURCES.

FINANCED WITH AID OF DINGELL-JOHNSON FUNDS

STATE OF MINNESOTA DEPARTMENT OF NATURAL RESOURCES	
DIVISION OF FISH AND WILDLIFE ECOLOGICAL SERVICES SECTION	
BALSAM LAKE (31-259)	UNNAMED (MUNSON BAY PUGHOLE) LAKE (31-279)
ITASCA COUNTY	
T.58, 59N. R.24W. S4-9, 31, 32	T.59N. R.24W. S.33
FIELDWORK SOM, DJS	DRAWN BY <i>John M. Hall</i>
DATE 8-25-81	PROJ. IDENT. NO. FW-1-R 26, 27

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STATE OF MINNESOTA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF FISH AND WILDLIFE

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