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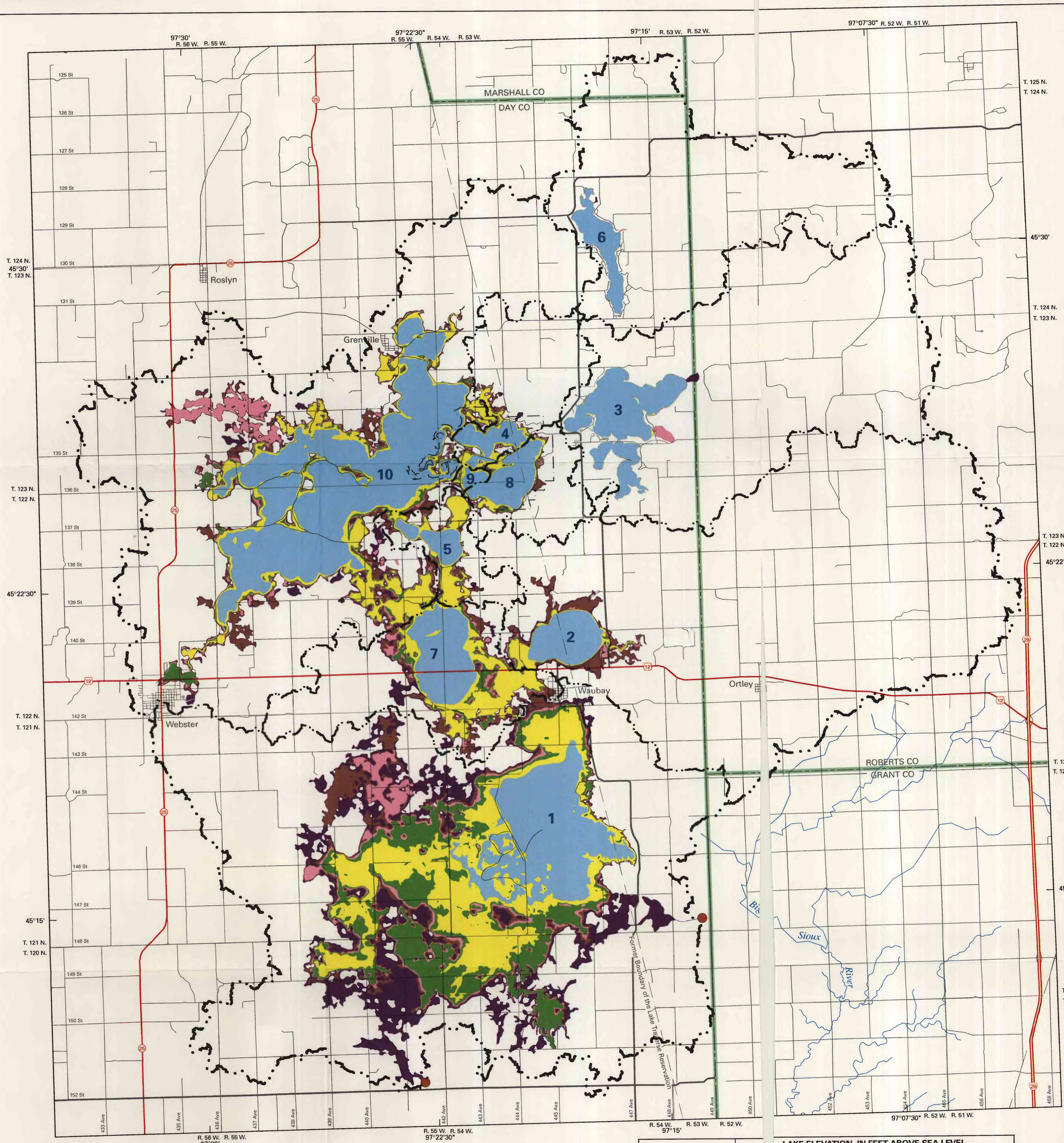
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
FEDERAL EMERGENCY MANAGEMENT AGENCY

WATER-RESOURCES INVESTIGATIONS REPORT 99-4251
—PLATE 1

Probabilities of lake extents, based on October 1, 1999, starting lake levels and with the farm crossings removed at the outlet between Rush and Bitter Lakes



Base from U.S. Geological Survey digital data 1:100,000, Webster, 1985; Sisseton, 1979
Universal Transverse Mercator projection zone 14
North American Horizontal Datum 1927

EXPLANATION

WAUBAY LAKES CHAIN BASIN BOUNDARY
SUBBASIN BOUNDARY
WAUBAY NATIONAL WILDLIFE REFUGE BOUNDARY
OUTLET FROM BASIN

LAKE EXTENT FOR INDICATED EXCEEDANCE PROBABILITY, CONDITIONAL FREQUENCY ANALYSIS

50 percent
10 percent
4 percent
2 percent
1 percent
0.2 percent

LAKE NAME AND NUMBER	LAKE ELEVATION, IN FEET ABOVE SEA LEVEL, FOR INDICATED EXCEEDANCE PROBABILITY					
	50 percent	10 percent	4 percent	2 percent	1 percent	0.2 percent
Bitter Lake (1)	1,786.[illegible]	1,799.4	1,803.8	1,806.8	1,809.2	1,813.5
Blue Dog Lake (2)	1,798.[illegible]	1,801.4	1,805.2	1,807.8	1,810.3	1,813.5
Enemy Swim Lake (3)	1,852.[illegible]	1,854.0	1,854.4	1,854.8	1,855.1	1,855.9
Hillebrands Lake (4)	1,792.[illegible]	1,801.5	1,805.2	1,807.9	1,810.5	1,813.6
Minnewasta Lake (5)	1,794.[illegible]	1,801.4	1,805.2	1,807.8	1,810.3	1,813.5
Pickerel Lake (6)	1,845.[illegible]	1,845.6	1,845.8	1,846.1	1,846.3	1,846.7
Rush Lake (7)	1,798.[illegible]	1,801.4	1,805.2	1,807.8	1,810.3	1,813.5
Spring Lake (8)	1,792.[illegible]	1,801.5	1,805.2	1,807.9	1,810.5	1,813.6
Swan Pond (9)	1,792.[illegible]	1,801.5	1,805.2	1,807.9	1,810.5	1,813.6
Waubay Lake (10)	1,792.[illegible]	1,801.4	1,805.2	1,807.8	1,810.3	1,813.5

SCALE 1:100,000

2 1 0 2 4 6 MILES

2 1 0 2 4 6 KILOMETERS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

Supplement to Water-Resources Investigations Report 99-4122, Lake-Level Frequency Analysis for the Waubay Lakes Chain, Northeastern South Dakota

By
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1999

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