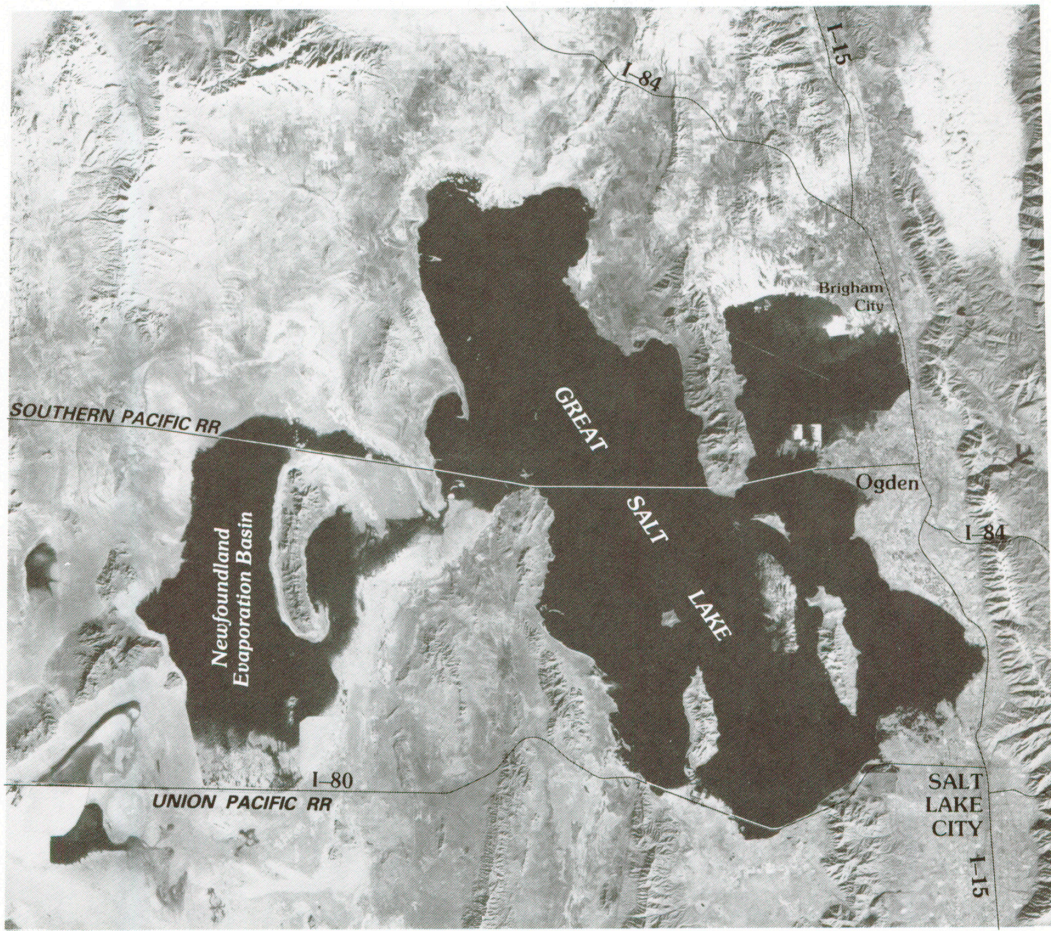
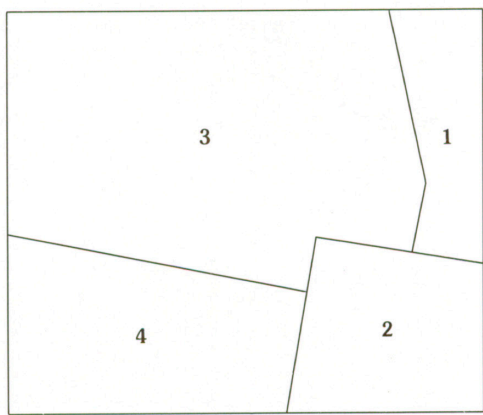


GREAT SALT LAKE  
AND  
NEWFOUNDLAND  
EVAPORATION BASIN  
1:250 000-SCALE  
SATELLITE IMAGE MAP



During 1987, the pond (Newfoundland Evaporation Basin) was created by massive pumping from the Great Salt Lake. As the pond was filling, the Landsat 5 Multispectral Scanner (MSS) imaged several successive water levels and accompanying shorelines. Three of these shorelines are depicted as white lines on the image map that displays most of the area as of December 19, 1987, when the pond was full, and water (brine) was returning to the main lake. The far eastern section of the map (see coverage diagram) was imaged on November 9, 1987. It should be noted that two or three distinct water levels exist in the pond at any given time when the pumps are in operation. The water-level gauge at the Saltair boat basin indicates that no significant wind-tide anomalies occurred at the times that the images were acquired. A false shoreline was visible on the southern end of the pond on the June 25 image, caused by water blown into depressions during a storm several days before the image was acquired. This shoreline did not represent the true extent of the pond created by the pumping operations, and therefore is not shown on the map. Major causeways and dikes have been manually enhanced in the water areas for clarity. The water level north of the railroad causeway in the pond was actually higher on June 25 and August 28 than it was when the pond was nominally full on December 18, 1987. This was because of heavy pumping during the June through August period. By December, pump flow had been reduced. Water-level elevations are not shown for the pond. Further surveys and recordings of water-level gauges are needed before this information can be provided.

Band 7 imagery from Landsat 5 (0.8–1.1  $\mu\text{m}$ , near infrared) was used to delineate the shorelines because this band shows the best contrast for the land/water boundaries.

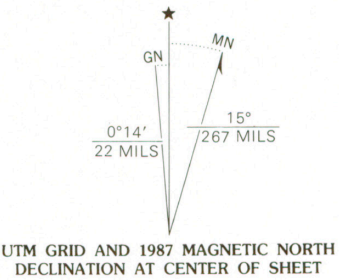


Path Row	Image ID	Date	Time (MST)
1 038 031	E-51348-17354	11 09 87	10:35 am.
2 038 032	E-51348-17360	11 09 87	10:36 am.
3 039 031	E-51387-17423	12 18 87	10:42 am.
4 039 032	E-51387-17425	12 18 87	10:42 am.

Images used to delineate shorelines during filling of Newfoundland Evaporation Basin

Path Row	Image ID	Date	Time (MST)
039 031	E-51163-17373	05 08 87	10:37 am.
039 031	E-51211-17384	06 25 87	10:38 am.
039 032	E-51211-17391	06 25 87	10:39 am.
039 031	E-51275-17402	08 28 87	10:40 am.
039 032	E-51275-17404	08 28 87	10:40 am.

Information on indexing, cost, and availability of Landsat data may be obtained from U. S. Geological Survey, EROS Data Center, Customer Services, Sioux Falls, South Dakota 57198.



FOR SALE BY U. S. GEOLOGICAL SURVEY  
DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092

Produced by the United States Geological Survey  
Image recorded by the Multispectral Scanner (MSS) on Landsat 5  
Mosaic scaled to identified mapped features  
The root-mean-square error in position of well-defined features is estimated to be less than 175 meters  
Projection and 10,000-meter grid, Universal Transverse Mercator, zone 12, 100,000-foot ticks Utah coordinate system, north and central zones. 1927 North American Datum To place on the North American Datum 1983 move the graticule 8 meters north and 68 meters east

GREAT SALT LAKE AND NEWFOUNDLAND  
EVAPORATION BASIN  
40111-E7-SI-250

1987  
EXPERIMENTAL EDITION



SCALE 1:250 000  
KILOMETERS 0 5 10 15 20 25 30 35 40 45  
MILES 0 5 10 15 20 25 30  
1 CENTIMETER ON THE MAP REPRESENTS 2.5 KILOMETERS ON THE GROUND  
5000 0 5000 10 000 15 000 20 000 25 000 30 000 35 000 40 000 45 000 METERS  
20 000 0 20 000 40 000 60 000 80 000 100 000 120 000 140 000 160 000 FEET