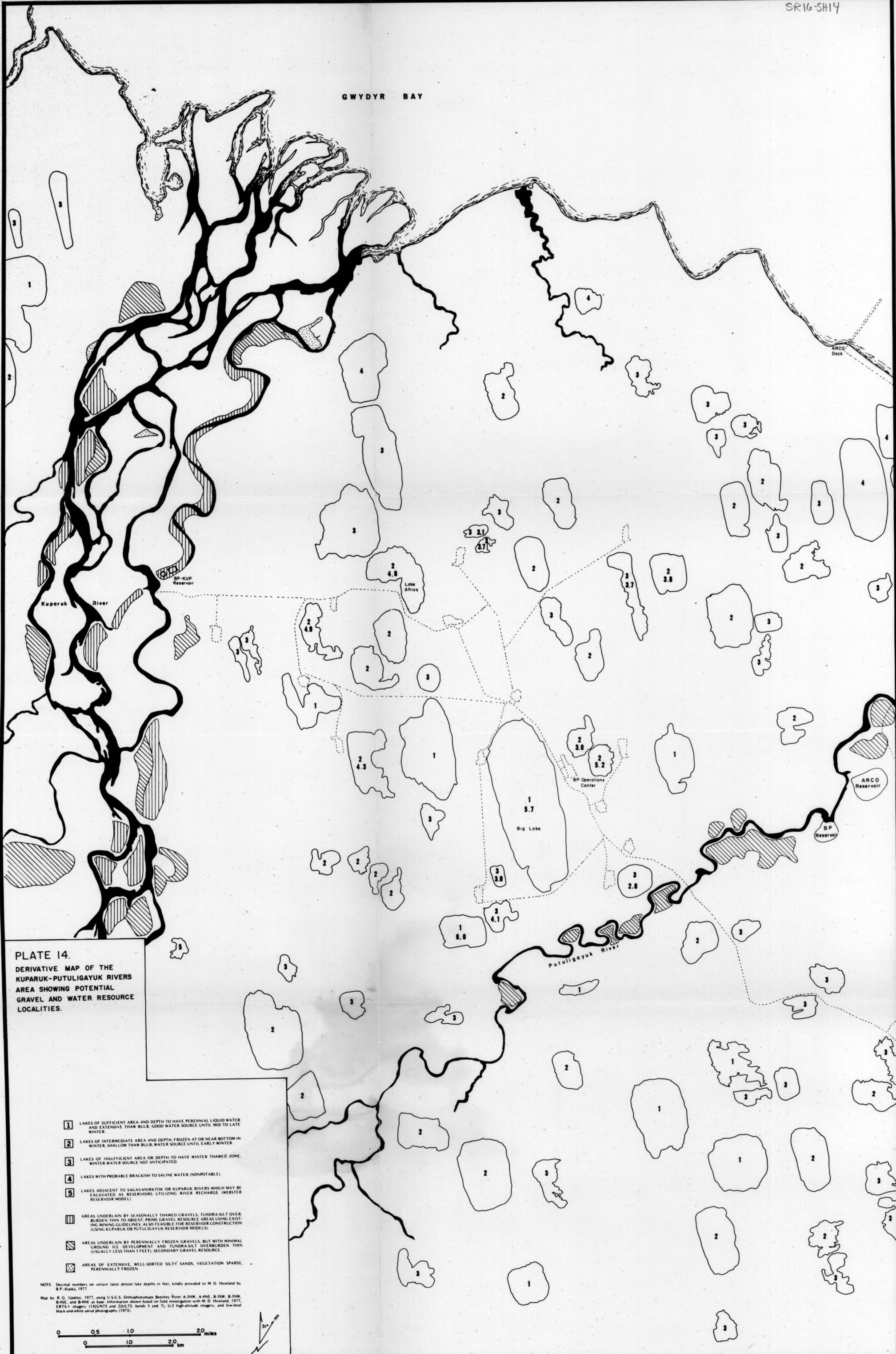


GWYDYR BAY



**PLATE 14.**  
**DERIVATIVE MAP OF THE**  
**KUPARUK-PUTULIGAYUK RIVERS**  
**AREA SHOWING POTENTIAL**  
**GRAVEL AND WATER RESOURCE**  
**LOCALITIES.**

- 1 LAKES OF SUFFICIENT AREA AND DEPTH TO HAVE PERENNIAL LIQUID WATER AND EXTENSIVE THAW BULB. GOOD WATER SOURCE UNTIL MID TO LATE WINTER.
- 2 LAKES OF INTERMEDIATE AREA AND DEPTH. FROZEN AT OR NEAR BOTTOM IN WINTER. SHALLOW THAW BULB. WATER SOURCE UNTIL EARLY WINTER.
- 3 LAKES OF INSUFFICIENT AREA OR DEPTH TO HAVE WINTER THAWED ZONE. WINTER WATER SOURCE NOT ANTICIPATED.
- 4 LAKES WITH PROBABLE BRACKISH TO SALINE WATER (NONPOTABLE).
- 5 LAKES ADJACENT TO SAGAVANIKTOK OR KUPARUK RIVERS WHICH MAY BE EXCAVATED AS RESERVOIRS UTILIZING RIVER RECHARGE (WEBSTER RESERVOIR MODEL).
- ▨ AREAS UNDERLAIN BY SEASONALLY THAWED GRAVELS. TUNDRA-SILT OVERBURDEN THIN TO ABSENT. PRIME GRAVEL RESOURCE AREAS USING EXISTING MINING GUIDELINES. ALSO FEASIBLE FOR RESERVOIR CONSTRUCTION (USING KUPARUK OR PUTULIGAYUK RESERVOIR MODELS).
- ▩ AREAS UNDERLAIN BY PERENNIALLY FROZEN GRAVELS, BUT WITH MINIMAL GROUND ICE DEVELOPMENT AND TUNDRA-SILT OVERBURDEN THIN (USUALLY LESS THAN 5 FEET). SECONDARY GRAVEL RESOURCE.
- ▤ AREAS OF EXTENSIVE, WELL-SORTED SILTY SANDS. VEGETATION SPARSE. PERENNIALLY FROZEN.

NOTE: Decimal numbers on certain lakes denote lake depths in feet, kindly provided to M. D. Howland by B.P.-Alaska, 1977.

Map by R. G. Uplike, 1977, using U.S.G.S. Orthophotomaps Beechey Point A-3NW, A-4NE, B-3SW, B-3NW, B-4SE, and B-4NE as base. Information shown based on field investigation with M. D. Howland, 1977; ERTS-1 imagery (14JUN73 and 21JUL73, bands 5 and 7); U-2 high-altitude imagery, and low-level black-and-white aerial photography (1973).

