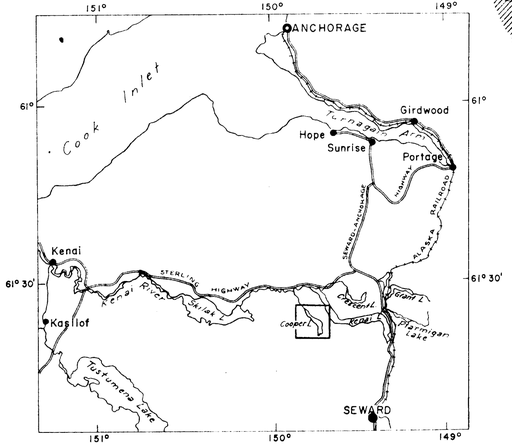
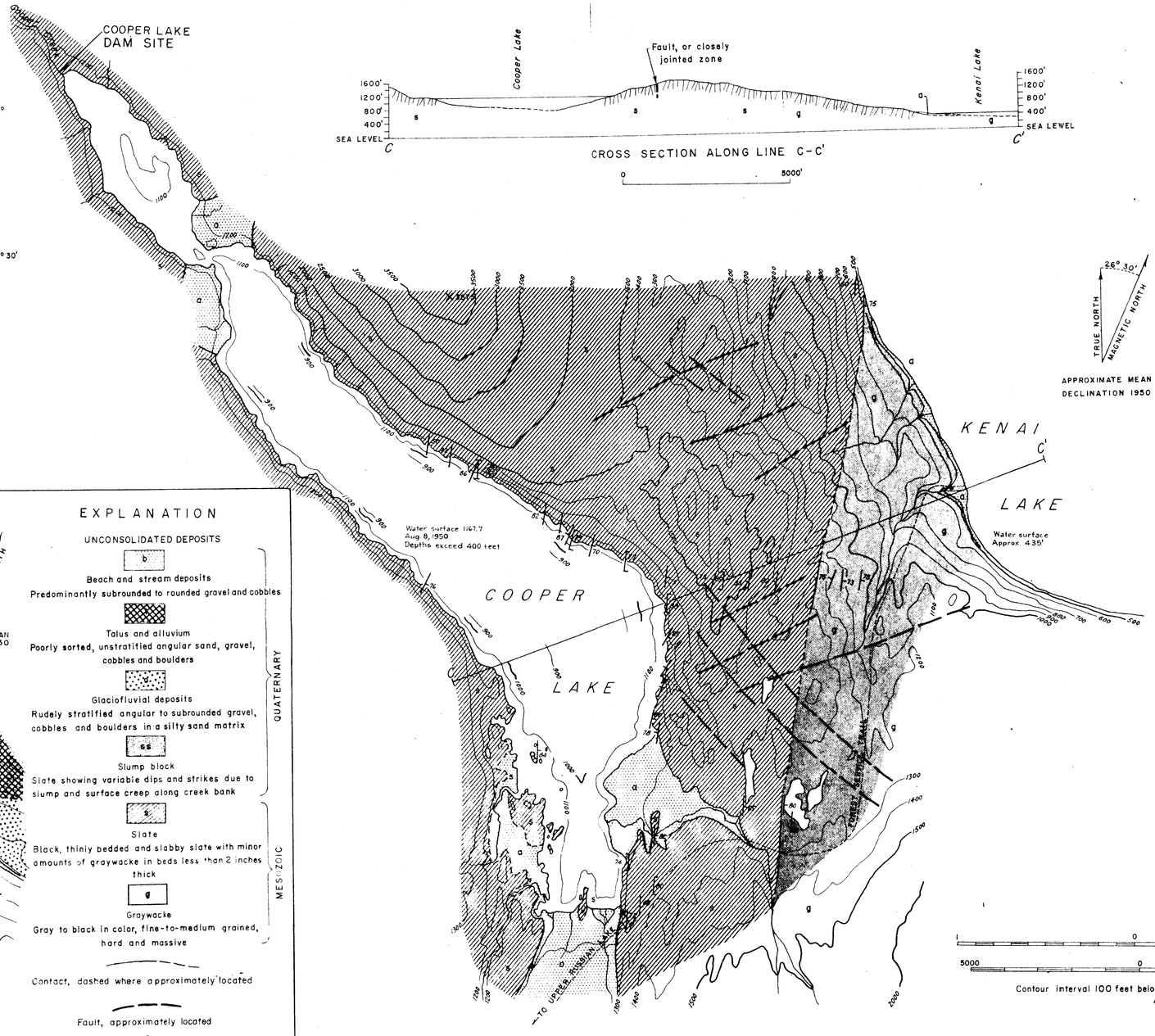


INDEX MAP



APPROXIMATE MEAN DECLINATION 1950

CROSS SECTION ALONG LINE C-C'

0 5000

EXPLANATION

UNCONSOLIDATED DEPOSITS

a — Alluvium
Predominantly sand, gravel, and cobbles

QUATERNARY

BEDROCK

s — Predominantly slate
Black, thinly bedded and slabby slate with subordinate amounts of graywacke in relatively thin lenses

sg — Interbedded graywacke and slate
Hard, massive graywacke in beds up to 500 feet thick interbedded with variable amounts of slate

MESOZOIC

75 — Contact; showing dip
(Dashed where approximately located)

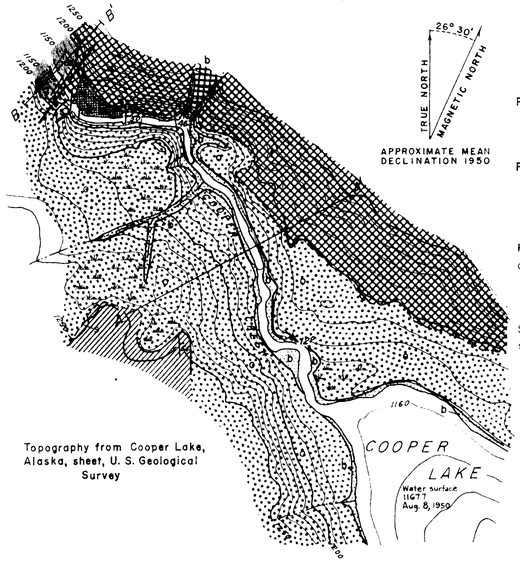
Possible fault or closely jointed zone indicated by linear topographic depression

50 — Strike and dip of bedding
(May be overturned)

90 — Strike of vertical beds

85 — Strike and dip of slaty cleavage

Strike of vertical cleavage



Topography from Cooper Lake, Alaska, sheet, U. S. Geological Survey

EXPLANATION

UNCONSOLIDATED DEPOSITS

b — Beach and stream deposits
Predominantly subrounded to rounded gravel and cobbles

a — Talus and alluvium
Poorly sorted, unstratified angular sand, gravel, cobbles and boulders

gf — Glaciofluvial deposits
Rudely stratified angular to subrounded gravel, cobbles and boulders in a silty sand matrix

ss — Slump block
Slate showing variable dips and strikes due to slump and surface creep along creek bank

QUATERNARY

s — Slate
Black, thinly bedded and slabby slate with minor amounts of graywacke in beds less than 2 inches thick

g — Graywacke
Gray to black in color, fine-to-medium grained, hard and massive

MESOZOIC

Contact, dashed where approximately located

Fault, approximately located

50 — Strike and dip of beds *(may be overturned)*

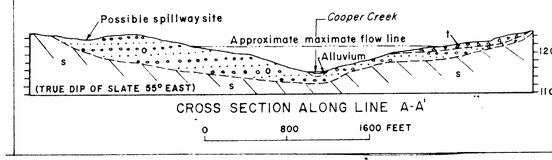
90 — Strike of vertical beds

12° — Dip of stratification in unconsolidated deposits

COOPER LAKE DAM SITE

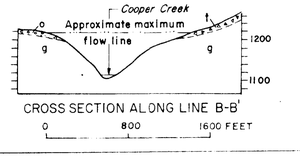
400 200 0 400 800 1200 FEET

Contour interval 10 feet
Datum is mean sea level



CROSS SECTION ALONG LINE A-A'

0 800 1600 FEET



CROSS SECTION ALONG LINE B-B'

0 800 1600 FEET

1 0 1 2 MILES

5000 0 5000 10 000 FEET

Contour interval 100 feet below 1500 feet elevation and 500 feet above 1500 feet
Datum is mean sea level

Topography compiled from Cooper Lake, Alaska sheet, scale 1:24,000, U. S. Geological Survey; and the Cooper Lake Quadrangle, scale 1:50,000, Corps of Engineers, U. S. Army; and aerial photographs, scale 1:40,000.

Geology by George Plafker
Mapped in August, 1950

GEOLOGIC MAP OF COOPER LAKE POWER SITE, ALASKA

This report is preliminary and has not been edited or reviewed for conformity with U. S. Geological Survey standards and nomenclature.

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