

Site No. 19050002-

## UNDEVELOPED HYDROELECTRIC SITE

State ALASKA County \_\_\_\_\_ Site GRANT LAKE  
 Location SE 1/4 Section 6, T. 4 N., R. 1 E., Seward Meridian Stream Grant C trail TRAIL R  
 Planned by (date) City of Seward, FPP 2129 (3/25/53); FPP 2262 (4/20/59)  
 Reference 2/ "A Water Power Reconnaissance in So. Central Alaska" USGS WSP 372, pg Date 1915  
 Quadrangle coverage Seward, Alaska (Recon.); Seward (B-7), Alaska; 5/ Plan, Profile, Dam site Grant C & L, Alaska  
 Land: Public \_\_\_\_\_ Private \_\_\_\_\_ Use:  I, FC, MI, R

W.S. ALT = 695 feet <sup>5/</sup>	Undeveloped capacity <u>0.820 mw - 4.479 mw <sup>2/</sup> - 4.889 mw <sup>10/</sup></u>
Dam: Height <u>50 feet <sup>2/</sup>, 75 feet <sup>10/</sup></u> Length <u>600' <sup>2/</sup></u> <sub>+ Dike</sub>	Percent efficiency _____
Normal pool altitude <u>745 feet <sup>2/</sup>, 770 feet <sup>10/</sup></u>	Annual generation _____
Reservoir area _____	Plant factor _____
Storage capacity <u>76,100 ac-ft <sup>2/</sup>; 150,000 ac-ft <sup>10/</sup></u>	Mean flow <u>193 ft<sup>3</sup>/sec (139,700 ac-ft/yr)</u>
Drainage area <u>43.5 square miles</u>	Period of record <u>9/1947 - 9/1958, gage</u> , DA=47.2
Gross head <u>745' - 472' = 273' <sup>2/</sup></u> mile down into TRAIL L. <u>770' - 472' = 298' <sup>10/</sup></u>	

Remarks: 1/ Original Calculations in STREAM Files.3/ "Water Power Possibilities in the General Vicinity of Anchorage and on the Kenai Peninsula", USGS, Johnson, 1/29/489/ "Inlet Report No 2, Cook Inlet & Tributaries", USACE, 1/20/502/ "Preliminary Report on the Potential Water Power of Grant, ... Lakes on the Kenai Peninsula ...", USGS, Johnson, 19558/ "Geologic Investigations of Proposed Power Sites at ... Grant ... Lakes, Alaska" USGS, Bulletin 1031-A, 19553/ "Cook Inlet & Tributaries, Alaska" H. Doc 34, 85th Cong. 1st Sess., USACE, 10/2/5611/ "Water Resource Activities in the U.S. - Water Resources of Alaska" Select Committee US Senate 1/60

(over)

Prepared by TSC Date 11/79

12 "Hydroelectric Requirements and Resources in Alaska" Hearings - U.S. Senate, 9/1960.

13 "Interim Report No. 2, Cook Inlet Hydroelectricity, Part 1, ..." H. Doc. 455, 87<sup>th</sup> Cong. 2<sup>nd</sup> Sess. USACE, 6/25/62.