

Site No. 19050002-145 TK  
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## UNDEVELOPED HYDROELECTRIC SITE

State ALASKA County \_\_\_\_\_ Site RUTH  
 Location Sec. 8, T32N, R3W Seward Meridian Stream CHULITNA River  
 Planned by (date) USGS ?  
 Reference PSC 406 Alaska Special Map 26 Date 1940  
 Quadrangle coverage TALKEETNA mtns (D-G) Alaska  
 Land: Public \_\_\_\_\_ Private \_\_\_\_\_ Use: P, I, FC, MI, R

ws alt = 1000' Dam: Height <u>100'</u> Length <u>800 feet</u> Normal pool altitude <u>1100'</u> Reservoir area _____ Storage capacity _____ Drainage area <u>1046 square miles</u> <span style="float: right;"><math>\frac{3.404 \text{ cfs}}{\text{mi}^2}</math></span> Gross head _____	$Q_{50} = 7.6 \text{ MW}$ Undeveloped capacity <u>30.264 mw theoretical</u> Percent efficiency _____ Annual generation _____ Plant factor _____ Mean flow <u>3560.47 cfs = 2,577,780 acft/yr</u> Period of record <u>14 yrs (1925) gage 15292400 area ratio</u>
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Remarks: Runoff by comparison with gage 15292400 is probably too high because of large glaciers in the basin - comparison with gage 15292700 shows about 2 cfs/sq mi. About 2.5 cfs/sq mi seems more appropriate. Large storage would be needed to regulate flow because large flows occur only in summer.

Mean flow = 2600 cfs  
 $Q_{50} = 2600 / 2.9 = 900 \text{ cfs}$

Prepared by TK Date 12/78  
SRO 12/78