

U.S. DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

Site No. 19060000-
Basin Index 13CC

WATERPOWER OF THE UNITED STATES

State ALASKA Stream Olive Creek - ETOLIN Island Site OLIVE LAKE

County <u>First Judicial Division</u>				Owner _____			
Mer. <u>Copper River T. 46 S</u> R. <u>84 E</u> Sec. <u>1</u>				Constructed _____			
Lat. <u>56° 10' 36" N</u> Long. <u>132° 20' 30" W</u>				Storage <u>7600 ^{3/}</u> of <u>by raising lake</u> m ³			
Miles above mouth <u>1.5 ^{1/}</u>				Installable capacity _____ mw			
Drainage Area <u>8.3</u> sq. mi. _____ sq. km				Annual generation _____ mwh			
				Secondary energy _____ mwh			

FLOW			ELEVATIONS				HEAD		THEORETICAL POWER mw-100 % Eff.	ESTIMATED AVERAGE ANNUAL GENERATION mwh
Percent duration	cfs	m ³ /sec	Forebay		Tailrace		Gross			
			ft.	m	ft.	m	ft.	m		
95	13		480		435 ^{3/}		45			Firm
50	94.									
mean	105 ^{1/}								0.402	

Remarks: Flows need to be evaluated, Isohyetal map ^{2/} indicates lower rainfall than used in 1947 report.

If powerhouse were located below cascades on Olive Creek; head = 480 - 80 = 400' T. Power = 3.57

^{1/} See "Water Powers of Southeast Alaska", FPC & USFS, 1947, pg 93

^{2/} See "A Proposed Streamflow Data Program in Alaska, USGS, 1970, pg 34

^{3/} Olive, Kunk & Anita lakes, 1950
PETERSBURG (A-2), ALASKA

Prepared by TJC Date 8/77

WATERPOWER OF THE UNITED STATES

State	Alaska	Stream	Olive Lake	Site	Olive Lake
County	First Judicial Division			Owner	
Mer.	Copper R. T. 66 S	R.	84 E	Sec.	1
Lat.	56 ° 10.6 '	Long.	132 ° 20 ' 5 "	Storage	5,000 af 6,167,450 m ³
Miles above mouth	1.5			Installed capacity	mw
Drainage Area	8.3	sq. mi.	21.50	sq. km	Installable capacity mw

FLOW			ELEVATIONS				HEAD		THEORETICAL POWER mw-100 % Eff.	ESTIMATED AVERAGE ANNUAL GENERATION mwh
Percent duration	cfs	m³/sec	Forebay		Tailrace		Gross			
			ft.	m	ft.	m	ft.	m		
95	13	0.4	480	146.3	120	36.6	360	109.7	0.40	
50	94	2.7							2.88	
mean	105	3.1							3.21	22,470

Remarks: Etolin Island - Petersburg A-2

Stolen 92

Basin Index _____

13 CC

State Alaska

Stream

Olive Lake

Site

Olive Lake

County First Judicial Division

Mer. _____ T. _____ R. _____ Sec. _____

Lat. 56° 10.6' " Long. 132° 30' 5"

Miles above mouth 21.50

Drainage Area 8.3 sq.mi. 29.50 sq. km

Owner _____

Constructed 6 167 450

Storage 5,000 af ~~1,167.45~~ m³

Installed capacity_____mw

Installable capacity_____mw

[illegible]

Prepared by _____ Date _____

Petersburg H 2