ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SPORT FISH
LAKE SURVEY SUMMARY

LAKE Chet Lake

MAP REF. Mt. Hayes D-4 T 12S R 10E S 32 LAT. 63°49'40"N LONG. 149°50'15"W

LOC. Ft. Greely, Donnelly Dome Area SURF. ELEV. 1925 ft.

1. SURF. ACRES 8 MAX. DEPTH 15 ft. AVG. DEPTH ____ ACRE FT. ____
SHOAL AREA ____ WATER COLOR clear SECCHI READING ____
AQUATIC VEGETATION unknown

2. FISH SPECIES: NATIVE grayling and suckers INTRODUCED none

3. FISHING HISTORY good grayling fishing, up to 13" fish taken

4. INVERTEBRATES unknown

5. INLETS one on S. end DISCHARGE 0.5 cfs
DISCHARGE ____ cfs
DISCHARGE ____ cfs
BARRIERS none

6. OUTLETS one on N. end drain into "J" Lake DISCHARGE 0.5 cfs
DISCHARGE ____ cfs
BARRIERS none

7. SPAWNING AREAS Limited area in inlet and outlet streams, grayling reportedly reproducing adequately

8. WATERSHED TYPE low brush on rolling hills DRAINAGE AREA 200 ACRES

9. ACCESSIBILITY 1/4 mile trail west off the Old Richardson Hwy, 4 mi. from junction with the new hwy. mi. 258.5

10. ACCESS STATUS open military reservation (access granted to public)

11. USE SITE none FACILITIES none

12. OTHER USE none

13. POLLUTION none

14. REMARKS

Lake chain connects with Delta R., thereby rendering sucker control infeasible (difficult). D.O. taken 4/7/64 and deemed adequate (6.0 ppm at 8 ft.).

Chet Lake

Date	Snow Depth	Ice Depth	Sample Depth	O_2 ppm	PH	Total Alk	Total Hard
4/7/64	8"	43"	8'	6.0			
4/21/67	3"	40"	7'	7.5			
			14'	4.0			
3/30/71				8.0	6.5		
10/17/74				~~7.0~~	7.0	17	51

BY [illegible] DATE 1964

Chet Lake:
USGS Topographic Sectional: Mt. Hayes

Chet Lake is located on the Fort Greely Military Reservation south of Delta Junction. Access to Chet Lake is by a gravel road that intersects the Richardson Highway at Mile Post 256. The surface area of Chet Lake is 3.2 ha (Table 27). The lake was first stocked in 1976 with Arctic grayling sac fry and was again stocked with Arctic grayling in 1985. Rainbow trout fingerlings were stocked annually between 1986 and 1989. Lake trout fingerlings were stocked in 1988 and 1989. Longnose suckers and slimy sculpins are present in Chet Lake and large numbers of these endemic species were caught in sampling gear during 1989 and 1990. Rates of survival of rainbow trout from stocking to age 1 decreased from 60% in 1989 to 1% in 1990. During the same time period, rates of survival for lake trout from stocking to age 1 increased from 1% in 1989 to 51% in 1990. No age 2 lake trout were captured in 1990 although a few fish of this cohort were caught as age 1 fish in 1989. The 1988 and 1989 mixed species stockings of lake trout and rainbow trout were fully successful based upon estimated density of age 1 game fish (297 and 127 fish per ha respectively). Mean lengths of age 1 rainbow trout in Chet Lake in 1989 and 1990 were 103 and 139 mm, respectively. Mean lengths of age 1 lake trout in 1989 and 1990 were 131 and 182 mm, respectively. Because of poor survival of lake trout stocked in 1988 and poor survival of rainbow trout stocked in 1989, neither the 1988 nor 1989 mixed species stockings into Chet Lake achieved desired diversity criteria.

Lake Specifics

Characteristic	Specifics
Location:	Fort Greely
Access status:	Road
Endemic species:	Longnose sucker, slimy sculpin
Stocked species:	Arctic grayling, lake trout, rainbow trout
Surface area:	3.2 ha