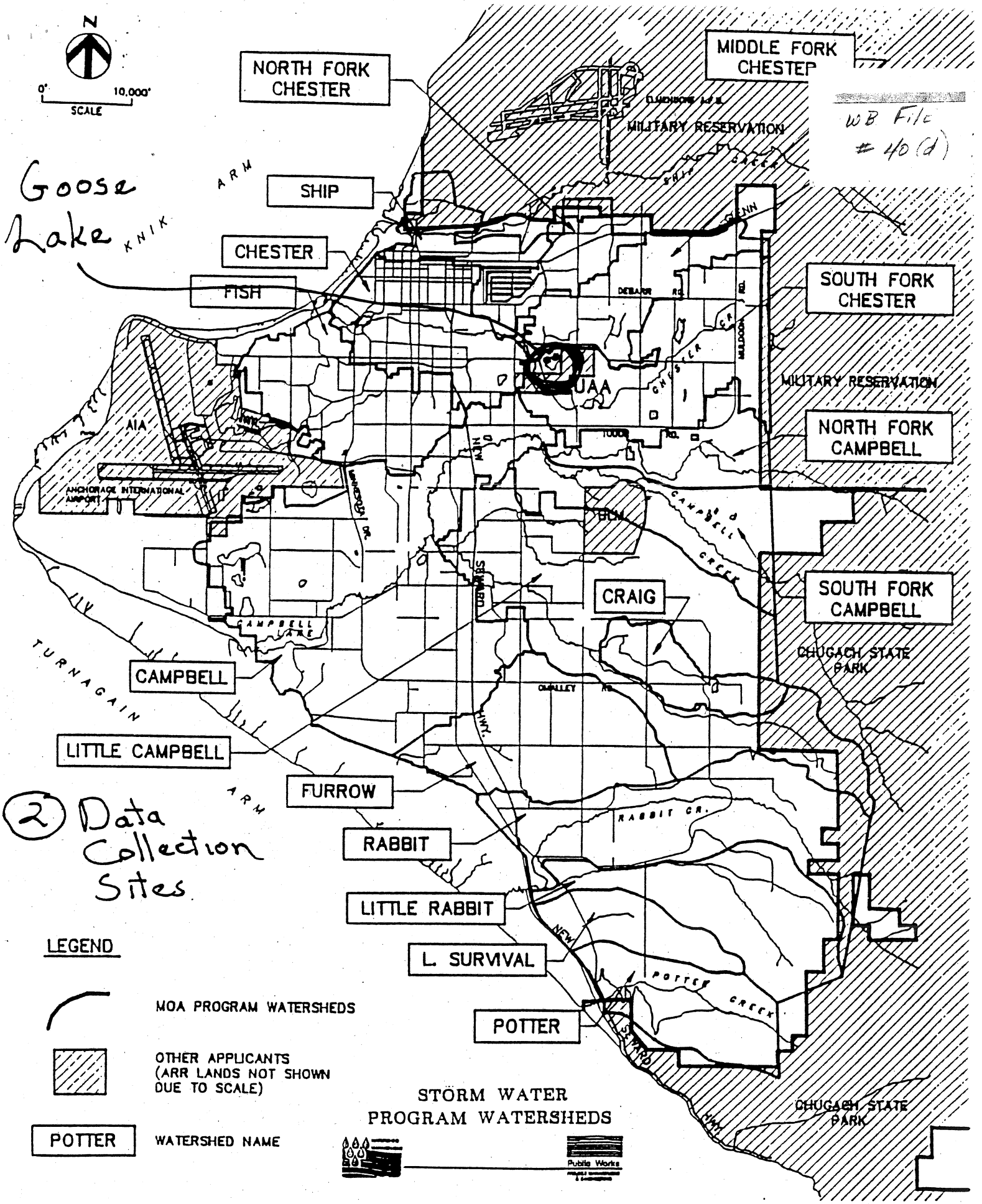
N
0'
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SCALE
NORTH FORK CHESTER
MIDDLE FORK CHESTER
MILITARY RESERVATION
SHIP
CHESTER
FISH
SOUTH FORK CHESTER
MILITARY RESERVATION
UAA
AIA
ANCHORAGE INTERNATIONAL AIRPORT
NORTH FORK CAMPBELL
BLM
CAMPBELL CREEK
CRAIG
SOUTH FORK CAMPBELL
CHUGACH STATE PARK
CAMPBELL
TURNAGAIN ARM
LITTLE CAMPBELL
FURROW
RABBIT
RABBIT CR.
LITTLE RABBIT
L. SURVIVAL
POTTER CREEK
POTTER
CHUGACH STATE PARK
Goose Lake
KNIK ARM
WB File # 40 (d)
② Data Collection Sites
LEGEND
MOA PROGRAM WATERSHEDS
OTHER APPLICANTS (ARR LANDS NOT SHOWN DUE TO SCALE)
POTTER
WATERSHED NAME
STORM WATER PROGRAM WATERSHEDS
Public Works

Goose Lake

Alaska ID Number 20401-407

A. ADEC Documentation

1. ADEC assessment forms submitted by MOA and 1989 ADEC assessment forms prepared by C. Kent appear to be the primary data bases for the proposed 1994 303(d) listing of Goose Lake.

B. Technical Review Comments

1. The lake is located within the sewered area of Anchorage. Over half of the shore area around the lake is protected parkland or University of Alaska land. There are no known storm drain systems emptying into the lake. There is one drainage stream which enters the lake from the North. There is no outlet stream. The lake is primarily fed by groundwater. Consequently, it is not significantly impacted by storm drain runoff or surface runoff.

C. Other Analysis

1. We believe that high concentrations of waterfowl during the late spring and summer months are the most likely source of observed exceedances of fecal coliform concentrations. The predominant source for observed elevated fecal coliform concentrations appear to be wild animals (waterfowl).

D. Conclusions and Recommendations

1. Exceedance of the water quality standards for fecal coliform typically occur during the summer months when high concentrations of waterfowl are present. No chronic anthropogenic source of fecal contamination is known for this lake. Elevated concentrations of fecal coliform appear to be associated with large populations of autochthonous waterfowl.

2. We recommend that:

   a) Goose Lake be removed from the proposed 1994 303(d) list on basis of lack of anthropogenic source [18 AAC 70.010(b)] and criterion requiring higher quality than natural conditions [18 AAC 70.025(a)(2)].

Site No.	1982 Site No.	Map No.	Site Description, Enforceable and Administrative Policies and Management Strategies	1982 Designation	
18	48	22, 23 and 33	SOUTH SIDE OF NORTHERN LIGHTS/BRAGAW, EAST OF GOOSE LAKE (35 acres; Public Ownership) (Scores: Hydrology = 76; Habitat = 75; Species Occurrence = 17; Social Function = 74) All "C" wetland sites surrounding "B" wetlands. Revised wetland boundary. *Drainage into B areas shall be avoided, i.e., maintained in present condition. A 15-foot transitional buffer shall be maintained between fill authorized under these GPs and adjacent "B" wetlands.* *A 25-foot transitional buffer shall be maintained between fill authorized under these GPs and adjacent "A" wetlands to the west. A 65-foot setback shall be maintained as a minimum along all drainageways. No development shall be authorized by the GPs east of the trail where the interface between areas designated B and C is closest to the trail. No fill shall be allowed to be placed under the GPs from April through June within 200 feet of the A-designated wetlands and within 50 feet of B-designated wetlands due to concern for nesting. If no damage would result to private property, treated, local storm water shall be directed into the wetland.*	Special Study	C
18A	48	33	MOSQUITO LAKE (14 acres; Public Ownership) (Scores: Hydrology = 85; Habitat = 88; Species Occurrence = 67; Social Function = 76) *Lake proper and northerly "A" wetlands shall be preserved without disturbance.* Isolated lobes south of lake and bike trail less valuable and could be filled for recreation or road expansions. *A 25-foot transitional buffer shall be maintained between fill authorized under these GPs and adjacent "A" wetlands. A 65-foot waterbody setback shall be maintained as a minimum around Mosquito Lake. No fill shall be allowed from April through July in this unit under the GPs to protect nesting near Mosquito Lake.*	Special Study	A/C
18B	48	33 and 34	NORTH SIDE PROVIDENCE, ALONG BRAGAW RIGHT-OF-WAY (21 acres; Public Ownership) (Scores: Hydrology = 58; Habitat = 73; Species Occurrence = 12; Social Function = 64) *Although identified and justified as developable in Goose Lake Plan; this site provides waterbird habitat in flooded westerly areas which shall be maintained.* Site filters runoff from easterly sections to Mosquito Lake complex. Key wetland areas lie in westerly portions and easterly transitional areas could be developed. *Runoff drainageways into flooded Mosquito Lake complex shall be maintained.*	Special Study	B
18C	47	33	CHESTER CREEK CORRIDOR: NORTHERN LIGHTS TO SOUTH OF PROVIDENCE HOSPITAL (19.2 acres; Public & Private Ownership) (Scores: Hydrology = 95; Habitat = 86; Species Occurrence = 79; Social Function = 82) Direct connection to Chester Creek: provides flood storage, water quality functions and wildlife habitat. *Providence Hospital improvements shall be located outside the wetland corridor. Other development shall be avoided except for minor recreation amenities.*	Preservation Special Study	A

Site No.	1982 Site No.	Map No.	Site Description, Enforceable and Administrative Policies and Management Strategies	1982 Designation
15	44	35	BAXTER LAKE (42 acres; Public & Private Ownership) (Scores: Hydrology = 131; Habitat = 122; Species Occurrence = 81; Social Function = 75) *Any development shall require a hydrology/drainage survey. Impervious structures shall be required at borders to minimize any dewatering of "A" and "B" wetland areas. Critical hydrological connections exist in "B" wetland areas which shall be avoided and protected..*	Developable Conservation Preservation
16	45	35	NORTH OF REFLECTION LAKE (2.5 acres; Private Ownership) (Scores: Not Assessed) Most of site already permitted/developed. Minimal values, marginal wetland.	Developable
17	46	23	NORTHERN LIGHTS/WESLEYAN & RUSSIAN JACK PARK (45 acres approx.; Public & Private Ownership) ("A" wetland scores: Hydrology = 94; Habitat = 84; Species Occurrence = 85; Social Function = 72. "B" wetland scores: Hydrology = 95; Habitat = 70; Species Occurrence = 53, Social Function = 58) Black spruce forested edges/southern rim is classed as "C" wetlands. *A 15-foot transitional buffer shall be maintained between fill permitted under General Permits and "B" wetland..* Remainder classed as "B" wetlands due to higher habitat, flood control and water quality values. Connection to fork of Chester Creek at the north. Russian Jack Park is "A" wetland area; most of the park area is important to Chester Creek.	Developable Conservation Preservation
17A	46	23	NORTH OF NORTHERN LIGHTS BOULEVARD AND WESLEYAN (3 acres; Private Ownership) (Scores: Hydrology = 91; Habitat = 55; Species Occurrence = 54; Social Function = 60) Partially disturbed area and old gravel pit; minimum values.	Developable
18	48	22, 23 and 33	GOOSE LAKE (36 acres; Public Ownership) (Scores: Hydrology = 88; Habitat = 120; Species Occurrence = 122; Social Function = 97) Documented high values for habitat, water quality and recreation. *Minor park amenities could be permitted but shall be concentrated at north end only.*	Special Study
18	48	23, 33 and 34	GOOSE LAKE (22.5 acres; Public Ownership) (Scores: Hydrology = 68; Habitat = 83; Species Occurrence = 15; Social Function = 74) Includes upper Mosquito Lake drainage. Important as feeder area for Mosquito Lake. *Fringes could be developed but key drainage sections shall be avoided.*	Special Study