

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

*** WATERBODY ***

Page 1 of 4

Name of Waterbody: Hidden LAKE (Hideway LAKE)

Location or Lat/Long: 61° 07' 23" 149° 44' 25"
in ANCHORAGE

Waterbody Type:	Waterbody Size:	ADEC USE ONLY 304: N L M S WQL: 0 - N 1 - PS 2 - NPS 3 - WQS 4 - Con/Ent ID#: _____
<input type="checkbox"/> River/Stream	_____ Miles	
<input checked="" type="checkbox"/> Lake	_____ Acres/Hectares	
<input type="checkbox"/> Fresh Wetland	_____ Acres/Hectares	
<input type="checkbox"/> Tidal Wetland	_____ Acres/Hectares	
<input type="checkbox"/> Estuary	_____ Square Miles	
<input type="checkbox"/> Coastal Shoreline	_____ Square Miles	
<input type="checkbox"/> Groundwater		

Segment of Waterbody Addressed:
 From: Entire Lake
 To: _____
 Other Description: _____
 Size of Segment: _____

USGS Hydrologic Unit #: AK 190 -20401-408

*** ASSESSMENT ***

Describe Source of Pollution and Documentation Provided: Water Quality monitoring by City of Anchorage - Secondary contact violation

Type of Documentation (Attached If Possible):

<input checked="" type="checkbox"/> Water quality data	<input type="checkbox"/> Written report	Assessment type:
<input type="checkbox"/> Documented oil spill	<input type="checkbox"/> Field notes	<input checked="" type="checkbox"/> Monitored
<input type="checkbox"/> Enforcement action	<input type="checkbox"/> Overflight	<input type="checkbox"/> Evaluated
<input type="checkbox"/> Photos with documentation	<input type="checkbox"/> Observation	
<input type="checkbox"/> Photos without documentation	<input type="checkbox"/> Other	

Violation of Water Quality Standards:

<input type="checkbox"/> Past Violation Documented	Waterbody Status:
<input checked="" type="checkbox"/> Current Violation Documented	<input type="checkbox"/> Impaired - Past
<input type="checkbox"/> Current Violation Suspected	<input checked="" type="checkbox"/> Impaired - Current
<input type="checkbox"/> Future Violation Projected	<input type="checkbox"/> Suspected
	<input type="checkbox"/> Unimpaired

Comments: _____

Author of This Assessment: C. Kelt Affiliation: ADEC Date: 89/08
YY/MM

Meets Clean Water Act Goals:

<input type="checkbox"/> Fishable	<input type="checkbox"/> Swimmable
<input checked="" type="checkbox"/> Not Fishable	<input checked="" type="checkbox"/> Not Swimmable
<input type="checkbox"/> Fishable Not Attainable	<input type="checkbox"/> Swimmable Not Attainable

Impaired Uses:

<u>FRESHWATER</u>	<u>MARINE</u>
<input checked="" type="checkbox"/> Drinking	<input type="checkbox"/> Aquaculture
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Seafood Processing
<input type="checkbox"/> Aquaculture	<input type="checkbox"/> Industry
<input type="checkbox"/> Industry	<input type="checkbox"/> Recreation, Contact
<input type="checkbox"/> Recreation, Contact	<input type="checkbox"/> Recreation, Secondary
<input checked="" type="checkbox"/> Recreation, Secondary	<input type="checkbox"/> Fish, Shellfish, Wildlife
<input type="checkbox"/> Fish, Shellfish, Wildlife	<input type="checkbox"/> Harvest of Fish, Shellfish

Support of Designated Uses:

- One or More Uses Not Supported (Impaired)
- One or More Uses Partially Supported (Partially Impaired)
- One or More Uses Suspected to Be Affected (Suspected)
- One or More Uses Projected to Become Affected (Projected)
- All Uses Fully Supported, sources present (Unimpaired)
- All Uses Fully Supported, no sources present (Unimpaired)

Trophic Status:	Trophic Trend
<input type="checkbox"/> Oligatrophic	<input type="checkbox"/> Improving
<input type="checkbox"/> Mesatrophic	<input type="checkbox"/> Stable
<input type="checkbox"/> Eutrophic	<input type="checkbox"/> Deteriorating
<input type="checkbox"/> Hypereutrophic	
<input type="checkbox"/> Dystrophic	
<input checked="" type="checkbox"/> Unknown	

*** TOXICS ***

Monitored for Toxics: Yes No

Type of Toxics Monitoring:

<input type="checkbox"/> 1 Organics in water column	<input type="checkbox"/> 10 Metals in sediments
<input type="checkbox"/> 2 Organics in sediments	<input type="checkbox"/> 11 Metals in fish tissue
<input type="checkbox"/> 3 Organics in fish tissue	<input type="checkbox"/> 12 Metals in discharges
<input type="checkbox"/> 4 Organics in discharges	<input type="checkbox"/> 13 Other inorganics in water column
<input type="checkbox"/> 5 Pesticides in water column	<input type="checkbox"/> 99 Other inorganics in sediments
<input type="checkbox"/> 6 Pesticides in sediments	<input type="checkbox"/> 99 Other inorganics in fish tissue
<input type="checkbox"/> 7 Pesticides in fish tissue	<input type="checkbox"/> 14 Other inorganics in discharges
<input type="checkbox"/> 8 Pesticides in discharges	<input type="checkbox"/> 15 Toxicity testing of water column
<input type="checkbox"/> 9 Metals in water column	<input type="checkbox"/> 16 Toxicity testing of sediments
	<input type="checkbox"/> 17 Toxicity testing of discharges

Fish and Shellfish Contamination:

- 0 None detected
- 1 Contaminated fish
- 2 Fishing advisory
- 3 Fishing ban
- 4 Fish abnormalities
- 5 Shellfish restrictions due to pathogens
- 6 Fish kill

Pollutants: (H = High, M = Medium, S = Slight)

- | | | |
|---|---|--|
| <input type="checkbox"/> 0 Cause Unknown | | |
| <input type="checkbox"/> 1 Unknown toxicity | | |
| <input type="checkbox"/> 2 Pesticides | Type _____ | |
| <input type="checkbox"/> 3 Priority organics | Type _____ | |
| <input type="checkbox"/> 4 Nonpriority organics | Type _____ | |
| <input type="checkbox"/> 5 Metals | Type _____ | |
| <input type="checkbox"/> 6 Ammonia | <input type="checkbox"/> 12 Organic enrichment | <input type="checkbox"/> 18 Radiation |
| <input type="checkbox"/> 7 Chlorine | <input type="checkbox"/> 13 Salinity/TDS/Chlorides | <input type="checkbox"/> 19 Oil and Grease |
| <input type="checkbox"/> 8 Other inorganics | <input type="checkbox"/> 14 Thermal modifications | <input type="checkbox"/> 20 Taste and Odor |
| <input checked="" type="checkbox"/> 9 Nutrients | <input type="checkbox"/> 15 Flow alteration | <input type="checkbox"/> 21 Suspended solids |
| <input type="checkbox"/> 10 pH | <input checked="" type="checkbox"/> 16 Habitat alteration | <input type="checkbox"/> 22 Noxious aquatic plants |
| <input type="checkbox"/> 11 Siltation | <input checked="" type="checkbox"/> 17 Pathogens | <input type="checkbox"/> 23 Filling and draining |

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources

- 1 Industrial
- 2 Municipal
- 3 Municipal pretreatment
- 4 Combined sewers
- 5 Storm sewers
- 6 Other dischargers

Resource extraction/exploration

- 51 Surface mining
- 52 Subsurface mining
- 53 Placer mining
- 54 Dredge mining
- 55 Petroleum activities
- 56 Mill tailings
- 57 Mine tailings

Nonpoint Sources

- 9 Unspecified

Land Disposal (Permitted Activities)

- 61 Sludge
- 62 Wastewater
- 63 Landfills
- 64 Industrial land treatment
- 65 Onsite wastewater systems
- 66 Hazardous waste
- 67 Septage disposal

Agriculture

- 11 Non-irrigated crop production
- 12 Irrigated crop production
- 13 Specialty crop production
- 14 Pasture land
- 15 Range land
- 16 Feedlots
- 17 Aquaculture
- 18 Animal holding areas
- 19 Manure lagoons

Hydrologic Modification

- 71 Channelization
- 72 Dredging
- 73 Dam construction
- 74 Flow regulation/modification
- 75 Bridge construction
- 76 Removal of riparian vegetation
- 77 Streambank modification
- 78 Draining/filling of wetlands

Silviculture

- 21 Harvest, restoration
- 22 Forest management
- 23 Road construction/maintenance

Construction

- 31 Highway/road/bridge
- 32 Land development

Other

- 81 Atmospheric deposition
- 82 Waste storage/storage tank leaks
- 83 Highway maintenance and runoff
- 84 Spills
- 85 In-place contaminants
- 86 Natural
- 87 Recreational activities
- 88 Upstream impoundment
- 89 Salt storage sites
- 99 Septic tank seepage

Urban Runoff

- 41 Storm sewers
- 42 Combined sewers
- 43 Surface runoff

Source Unknown

- 90 Source Unknown

DESCRIBE POLLUTANTS AND POLLUTANT SOURCES. THE BASIS FOR THE DETERMINATION THAT A WATERBODY IS IMPAIRED MUST BE EXPLAINED IN THIS SECTION. DESCRIBE THE NATURE OF THE VIOLATION OF WATER QUALITY STANDARDS, INCLUDING DATA OR OTHER DOCUMENTATION IN RELATION TO STANDARDS. ALSO DESCRIBE WHETHER THE VIOLATION IS CONSIDERED PAST OR CURRENT, AND OTHER RELEVANT INFORMATION.

Urban runoff contributes to High coliform counts in this lake. Lake may be posted for swimming. Marc Little is the person who nominated this stream for impaired category.

Point Sources:

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: Yes No
Pollutant: _____

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NPDES Permit Name: _____
Causes Nonattainment: Yes No
Pollutant: _____

Nonpoint Sources:

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

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Nonpoint Source Type: _____
Nonpoint Source Description: _____

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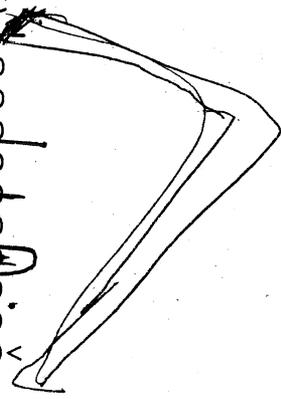
FROM DATE: 01/01/80 WATERSHED: HIL HIDDEN LAKE SHORE NR HILLSIDE
 TO DATE: 02/09/95 STATION #: 1000 # O'MALLEY

PARAMETERS SELECTED:

DATABASE	ABBREVIATION	DESCRIPTION
NTL1 LAB	FE_COL	Fecal Coliform Col
NTL1 LAB	E_COLI	E. Coli Col
NTL1 LAB	ENTEROC	Enterococci Col

WB F/E
48(a)

DATE	WSH	STA#	NTL1 LAB FE_COL	NTL1 LAB E_COLI	NTL1 LAB ENTEROC
05/25/88	HIL	1000	2150.0000	464.0000	64.0000
07/22/88	HIL	1000	210.0000	300.0000	460.0000
10/04/88	HIL	1000	420.0000	310.0000	430.0000
02/28/89	HIL	1000	2.0000<	2.0000<	2.0000
02/28/89	HIL	1000	2.0000<	2.0000<	2.0000
05/16/89	HIL	1000	180.0000	190.0000	70.0000
07/27/89	HIL	1000	6600.0000	6230.0000	260.0000
07/27/89	HIL	1000	6600.0000	6230.0000	260.0000
09/19/89	HIL	1000	290.0000	250.0000	38.0000
02/14/90	HIL	1000	2.0000<	2.0000<	2.0000<



SUMMARY:

NUMBER OF ENTRIES	10	10	10
AVERAGE VALUE	1645.6000	1398.0000	158.8000
STANDARD DEVIATION	2687.4092	2551.2910	179.4986
NUM BELOW DETECTION	3	3	1
(%) BELOW DETECTION	30.00	30.00	10.00
MAXIMUM VALUE	6600.0000	6230.0000	460.0000
MINIMUM VALUE	2.0000	2.0000	2.0000
GEOMETRIC MEAN	<u>142.4870</u>	120.3306	42.2700
MEDIAN	290.0000	300.0000	70.0000

se - homes - around lake
 High nitrates in wells around
lakes - High nitrates in wells due
 to onsite sewage systems up to 4-5
 Runoff is source of water in
Lake Hidden

WB FILE
48(6)

From: HEATHER DEAN (HDEAN)
To: JPOSTON
Date: Tuesday, February 14, 1995 1:25 pm
Subject: 303(d) LIST

Hi Jackie! Since you gave me my copy of the list, I'm asking you: I got a call from Anita Kowalchuk, who had some questions about Hideaway (aka Hidden) Lake. I told her that the lake is on the list, & the reason given is Urban Runoff. She also wants to know when it was listed. I sent her a copy of our Sep 91 letter; is that the date? Finally, she wants to know what the listing means for the future & what effect the withdrawal of 5 million gallons of water per year from nearby groundwater might have on the lake (I didn't know the answer to either). Any ideas?

