

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

LONG FORM

*** WATERBODY ***

Page 1 of 4

Name of Waterbody: Beaver Lake

Location or Lat/Long: 57° 48' 30" 152° 22' 40" near Kodiak

Waterbody Type: River/Stream Lake Fresh Wetland Tidal Wetland Estuary Coastal Shoreline Groundwater

Waterbody Size: _____ Miles _____ Acres/Hectares _____ Acres/Hectares _____ Square Miles _____ Square Miles

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

USGS Hydrologic Unit #: AK 190 20701-405

ADEC USE ONLY
304H: N L M S
WQL: 0 - N
1 - PS
2 - NPS
3 - WQS
4 - Con/Ent
ID#: _____

*** ASSESSMENT ***

Describe Source of Pollution and Documentation Provided: Surface runoff from subdivision and failing septic tanks

Type of Documentation (Attached If Possible): Water quality data Documented oil spill Enforcement action Photos with documentation Photos without documentation Written report Field notes Overflight Observation Other

Assessment type: Monitored Evaluated

Violation of Water Quality Standards: Past Violation Documented Current Violation Documented Current Violation Suspected Future Violation Projected

Waterbody Status: Impaired - Past Impaired - Current Suspected Unimpaired

Comments: Submitted by Kodiak Island Borough

Author of This Assessment: Chris Kent Affiliation: ADEC Date: 89 08
YY/MM

Meets Clean Water Act Goals:

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

Impaired Uses:

FRESHWATER

- Drinking
- Agriculture
- Aquaculture
- Industry
- Recreation, Contact
- Recreation, Secondary
- Fish, Shellfish, Wildlife

MARINE

- Aquaculture
- Seafood Processing
- Industry
- Recreation, Contact
- Recreation, Secondary
- Fish, Shellfish, Wildlife
- 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:

- Oligatrophic
- Mesatrophic
- Eutrophic
- Hypereutrophic
- Dystrophic
- Unknown

Trophic Trend

- Improving
- Stable
- Deteriorating

*** 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 type="checkbox"/> 9 Nutrients | <input type="checkbox"/> 15 Flow alteration | <input type="checkbox"/> 21 Suspended solids |
| <input type="checkbox"/> 10 pH | <input type="checkbox"/> 16 Habitat alteration | <input type="checkbox"/> 22 Noxious aquatic plants |
| <input type="checkbox"/> 11 Siltation | <input 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

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

Construction

- 31 Highway/road/bridge
- 32 Land development

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 from developed and septic tanks

Point Sources:

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

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

Nonpoint Sources:

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

Nonpoint Source Name: _____
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Nonpoint Source Description: _____

New

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1988 STATEWIDE WATER QUALITY ASSESSMENT

*** WATERBODY ***

Page 1 of 5

Name of Waterbody: Beaver Lake

Type/Size: River/Stream _____ Miles
 Lake 130 Acres/Hectares
 Fresh Wetland _____ Acres/Hectares
 Tidal Wetland _____ Acres/Hectares
 Estuary _____ Square Miles
 Coastal Shoreline _____ Miles
 Groundwater _____

USGS Hydrological Unit #: 190- 20701

Location or Lat/Long: Kodiak

Is the waterbody in a national or state park, monument, refuge, preserve, or similar area?: Yes , No , Name _____

ID#: AK-¹⁹⁰20701-401
3041: N L M S
WQL: 0 - N
1 - PS
2 - NPS
3 - WQS
4 - Con/Enf
Stat: I T U
[ADEC Use Only]

UR

*** ASSESSMENT ***

Assessment Date: Yr 88 , Mo 6 / By Bud Cassidy , Kodiak
Sampling: Begin Yr ___ , Mo ___ / End Yr ___ , Mo ___ / By _____
Reference for Data: _____

Basis for Assessment:
 1 Qualitative, land use/sources
 1 Qualitative, complaints/2nd hand
 2 Predictive models, unverified
 3 Calibrated models
 4 Fixed station data, Bio or Chem
 5 Effluent toxicity testing
 6 Limited site visit
 7 Intensive field assessment

Assessment Category:
 Monitored (Data)
 Evaluated (Judgement)

Next Planned Assessment: Yr ___ , Mo ___ / By _____

Comments: _____

Size-A Size-M Support Partial Not-Sup Cause-% Size-10 Size-No Why?

Meets Clean Water Act Goals:

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

Impaired or Threatened Uses:

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

Support of Designated Uses:

- All Uses Fully Supported, no sources present
- All Uses Fully Supported, sources present
- One or More Uses Threatened
- One or More Uses Partially Supported
- One or More Uses Not Supported

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
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*** TOXICS ***

Monitored for Toxics: Yes , No

Type of Toxics Monitoring:

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- | | | | |
|--|---|-------|--|
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- 6 Fish kill

*** POINT AND NONPOINT SOURCES ***

Point Sources:

- 1 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: Yes , No , Pollutant _____
- 2 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: Yes , No , Pollutant _____
- 3 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: Yes , No , Pollutant _____

Nonpoint Sources:

- 1 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

- 2 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

- 3 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

[Including extent of impairment of uses; significance of impacts on public health and the environment; water quality trend; efforts to control pollutants; current priority for developing pollutant controls; and adequacy of data]

Receives flood drainage from Elderberry Heights
subdivision, which is located in former wetland
Drainage was channeled, now floods + flows into
Beaver L. Some surface runoff products
Considerable sediment

7

1