

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

LONG FORM

\*\*\* WATERBODY \*\*\*

Page 1 of 4

Name of Waterbody: JOHNSON CREEK

Location or Lat/Long: 58° 50' , 138° 02'

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<b>Waterbody Type:</b>	<b>Waterbody Size:</b>	<b>ADEC USE ONLY</b> 304: N L M S WQL: 0 - N 1 - PS 2 - NPS 3 - WQS 4 - Con/Ent ID#: _____
<input checked="" type="checkbox"/> River/Stream	<u>4</u> Miles	
<input 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	_____ Square Miles	

**Segment of Waterbody Addressed:**  
 From: \_\_\_\_\_  
 To: \_\_\_\_\_  
 Other Description: West side of Berners Bay, about 35 mi north of Juneau.  
 Size of Segment: \_\_\_\_\_

USGS Hydrologic Unit #: AK 190 10301-006

\*\*\* ASSESSMENT \*\*\*

**Describe Source of Pollution and Documentation Provided:**  
Potential mercury contamination from abandoned stamp mill.

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**Type of Documentation (Attached If Possible):**

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

**Assessment type:**

<input checked="" type="checkbox"/> Monitored
<input checked="" type="checkbox"/> Evaluated

**Violation of Water Quality Standards:**

<input type="checkbox"/> Past Violation Documented
<input type="checkbox"/> Current Violation Documented
<input checked="" type="checkbox"/> Current Violation Suspected
<input type="checkbox"/> Future Violation Projected

**Waterbody Status:**

<input type="checkbox"/> Impaired - Past
<input type="checkbox"/> Impaired - Current
<input checked="" type="checkbox"/> Suspected
<input type="checkbox"/> Unimpaired

Comments: \_\_\_\_\_

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Author of This Assessment: S. Bralley Affiliation: ADEC/wqm Date: 89/09  
 YY/MM

**Meets Clean Water Act Goals:**

- Fishable
- Not Fishable
- Fishable Not Attainable
- Swimmable
- Not Swimmable
- 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:**

N/A

- Oligotrophic
- Mesotrophic
- Eutrophic
- Hypereutrophic
- Dystrophic
- Unknown

**Trophic Trend**

- Improving
- Stable
- Deteriorating

\*\*\* TOXICS \*\*\*

**Monitored for Toxics:**  Yes  No

**Type of Toxics Monitoring:**

- 1 Organics in water column
- 2 Organics in sediments
- 3 Organics in fish tissue
- 4 Organics in discharges
- 5 Pesticides in water column
- 6 Pesticides in sediments
- 7 Pesticides in fish tissue
- 8 Pesticides in discharges
- 9 Metals in water column
- 10 Metals in sediments
- 11 Metals in fish tissue
- 12 Metals in discharges
- 13 Other inorganics in water column
- 99 Other inorganics in sediments
- 99 Other inorganics in fish tissue
- 14 Other inorganics in discharges
- 15 Toxicity testing of water column
- 16 Toxicity testing of sediments
- 17 Toxicity testing of discharges

**Fish and Shellfish Contamination:**

- 0 None detected
- 1 Contaminated fish - detected mercury
- 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 checked="" 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.

Johnson Cr. has mercury contamination from subsurface mining activities for precious metals in the watershed; mercury used in Stamp Mill process.

Nov. 1988 - "Mercury in Fish on Johnson Creek" by Entropy:

Sediment samples  
Mercury = 3-8 ppm in 3 out of 20 samples.

**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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