

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1988 STATEWIDE WATER QUALITY ASSESSMENT

*** WATERBODY ***

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Red Devil Cr

Name of Waterbody: ~~Strong River~~

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

USGS Hydrological Unit #: 190-30501

Location or Lat/Long: E of ~~Amiak~~ / Amiak _____
Red De _____

Is the waterbody in a national or or similar area?: Yes , No ,

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

*** ASSESSMENT ***

Assessment Date: Yr 88 *AI*
 Sampling: Begin Yr _____ *U*
 Reference for Data: _____ *Sus*

Basis for Assessment:
 1 Qualitative, _____
 1 Qualitative, complai _____
 2 Predictive models, u _____
 3 Calibrated models _____
 4 Fixed station data, Bio or Chem _____
 5 Effluent toxicity testing _____
 6 Limited site visit _____
 7 Intensive field assessment _____

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

Comments: Tailings with Mercury contamination
see Haz Waste report
1940's mine up to 1971
Red Devil Cr. .3 mg/l Hg, ~~probably~~ As

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

Meets Clean Water Act Goals:

- | | |
|--|---|
| <input type="checkbox"/> Fishable | <input 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:

IMP THR - FRESHWATER

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

IMP THR - MARINE

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

- Oligotrophic
- Mesotrophic
- 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 |

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

- 1 Unknown toxicity
- 2 Pesticides Type _____
- 3 Priority organics Type _____
- 4 Nonpriority organics Type _____
- # 5 Metals Type Hg, As
- 6 Ammonia
- 7 Chlorine
- 8 Other inorganics
- 9 Nutrients
- 10 pH
- 11 Siltation
- 12 Organic enrichment
- 13 Salinity/TDS/Chlorine
- 14 Thermal modifications
- 15 Flow alteration
- 16 Habitat alteration
- 17 Pathogens
- 18 Radiation
- 19 Oil and Grease
- 20 Taste and Odor
- 21 Suspended solids
- 22 Noxious aquatic plants
- 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

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

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

Hydromodification

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

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 Septic tank seepage

Urban Runoff

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

Source Unknown

- 90 Source Unknown

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

*** 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]

Red Devil Mercury mine

active 38 yrs up to 1971

produced 2 1/2 million lb Hg

Mine on Red Devil Cr - 450' above mouth

on Kuskokwim