

BEAR

MEMORANDUM

State of Alaska

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Northern Regional OfficeTO: Dave Sturdevant
Environmental Specialist
ADEC/Juneau

DATE: March 25, 1992

FILE NO: Correspondence

TELEPHONE NO: 451-2360

FROM: Conrad Christianson *CJC*
Environmental Engineer
ADEC/FairbanksSUBJECT: 305(b) List,
Placer Streams

Forwarded under separate cover are data sheets for placer streams which may be included in the 305(b) List. The streams were selected by agreement during a meeting of the following individuals on March 17, 1992:

Scott Ray, Div. of Water, ADNR
Al Townsend, Mac McLean, Habitat Div., ADF&G
John Wood, Div. of Mining, ADNR
Paul Bateman, Ron McCallister, Conrad Christianson, ADEC

The stream selections were based on repeated observations of water quality violations, available water quality data and the best professional judgement of the individuals involved. The following streams were selected:

Bear Creek, Tributary of the Hogatza River.
Birch Creek, above Harrison Creek, Northeast of Fairbanks.
Crooked Creek, near Central.
Fish Creek, Tributary of the Little Chena River, near Fairbanks.
Goldstream Creek, below Fox Creek, near Fairbanks.
Illinois Creek, Tributary of the Yukon River, Melozitna Quad.
Ketchum Creek, Tributary of Crooked Creek, near Central
Minook Creek, Tributary of the Yukon River, Tanana Quad.
Moose Creek, Tributary of the Fortymile River, source of pollution - placer operations in Canada.

~~The consensus of the group was that it would not be appropriate to apply TMDL's to placer streams at this time, therefore, no streams were selected for inclusion on the 305(d) TMDL list.~~

cc: Al Ott
Pete McGee
Scott Ray
John Wood

MEMORANDUM**State of Alaska****DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Northern Regional Office****TO: Pete McGee
Paul Bateman****DATE: March 27, 1992****FILE NO: Correspondence****TELEPHONE NO: 451-2360****FROM: Conrad** **SUBJECT: Placer TMDL List**

Yesterday we held a teleconference with Dave Sturdevant to review the proposed 305(b) list of placer streams previously forwarded to Dave. The individuals present at ADEC for the teleconference included the following:

Kathy Charlie, Gerry Fogg, Div. of Mining, ADNR
Scott Ray, Div. of Water, ADNR
Mac McLean, Habitat Div., ADF&G
Bill Morgan, Ron McCallister, Joyce Baelman, Brad Fristoe,
Conrad Christianson, ADEC

Dave explained that the State is required to develop TMDL's under the Clean Water Act and is under increasing pressure to do so by EPA and the Courts as a result of a lawsuit by the Trustees. The judge for the Trustees lawsuit has delayed a decision in the case until the State responds to EPA as required under the recent TMDL agreement with EPA. ADEC must submit a list of TMDL candidate streams to EPA by April 1st. How the State responds will influence the Judge's decision.

The following streams were suggested for inclusion on the TMDL candidate list or to be left on the impaired list. The TMDL list is in order of priority for conducting a TMDL assessment. The assessment will determine if TMDL's should be applied to the stream. Minook Creek was removed from the list entirely because of a lack of hard data from recent years.

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March 27, 1992

TMDL Candidate List:

Birch Creek, above Harrison Creek
Crooked Creek, above Central
Goldstream Creek, below Fox Creek

Impaired List:

Bear Creek, Tributary of the Gogatza River
Fish Creek, Tributary of the Little Chena River
Illinois Creek, Tributary of the Yukon River
Ketchum Creek, Tributary of Crooked Creek
Moose Creek, Tributary of the Fortymile River

Dave will be sending a memo to Pete asking him to appoint a project leader to conduct an assessment on one placer stream. The EPA agreement requires completion of the assessment by April 1, 1993 and development of TMDL's, if required, by June 30, 1994. The assessment will be incorporated into the upcoming field season utilizing existing resources and will include monitoring for turbidity, SS and arsenic as we currently do plus possibly metals. Dave will be sending assessment guidelines in two to three weeks.

Attached is a copy of draft criteria for identification and prioritization of 303(d) waters FAX'd to us by Dave for the teleconference.

cc/blt

cc: John Wood, ADNR
Al Ott, ADF&G
Scott Ray, ADNR
Kathy Charlie, ADNR
Mac McLean, ADF&G
Al Townsend, ADF&G
Bill Morgan, ADEC
Ron McCallister, ADEC
Joyce Beelman, ADEC
Brad Fristoe, ADEC

June 22, 1995

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MEMORANDUM:

SUBJECT: Review of Alaska Department of Environmental Conservation (ADEC) 1994 Section 303(d) List - Bear Creek

FROM: Curry Jones
Water Quality Section

TO: File

The following identifies and summarizes communication I has with EPA personnel in completing EPA's review of ADEC's 1994 Section 303(d) list.

1. I spoke with Steve McGroarty from the Alaska Department of Natural Resources-DOMWM on May 22, 1995 about Bear Creek. He indicated that there are two placer mining operation on Bear Creek. One of the placer mining operation is a bucket line dredging which occasional causes an exceedence of Alaska water quality standards. Mr. McGroarty had no data on turbidity to show that there had been exceedence of water quality standards. He referred me to Mr. Steve Lundeen of DOI-BLM.
2. I spoke with Mr. Lundeen from the Bureau of Land Management about Bear Creek. He also indicated there was a turbidity problem on Bear Creek, but the data that he had was very limited. He faxed me a copy of the data, which turned out to contain only a single set of data for the month of July. This information was not enough to adequately determine if this waterbody was impaired.

Bear Creek



3a.

FAX TRANSMISSION COVER SHEET

To: <i>CURRY JONES EPA SEATTLE</i>	
From: <i>STEVE LUNDEEN BLM FAIRBANKS</i>	
Date: <i>5/26/95</i>	Time: <i>12:30</i>
Subject: <i>BEAR CREEK DATA</i>	
Fax No. of Recipient: <i>206 553 0165</i>	
Company Name: <i>EPA</i>	
No. of Pages to Follow: <i>2</i>	

If there are any problems in transmitting please call (907) 474-2330.

DIRECT FAX NUMBER: (907) 474-2281

Transmitted by:

REMARKS

[Empty box for remarks]

Date: 5/26/95
To: Curry Jones, EPA Seattle
From: Steve Lundeen, BLM Fairbanks, Ak.
Subject: Turbidity Data for Bear Creek Mining Operation Near
Hogatza, Ak. T9N, R5E, Kateel River Meridian

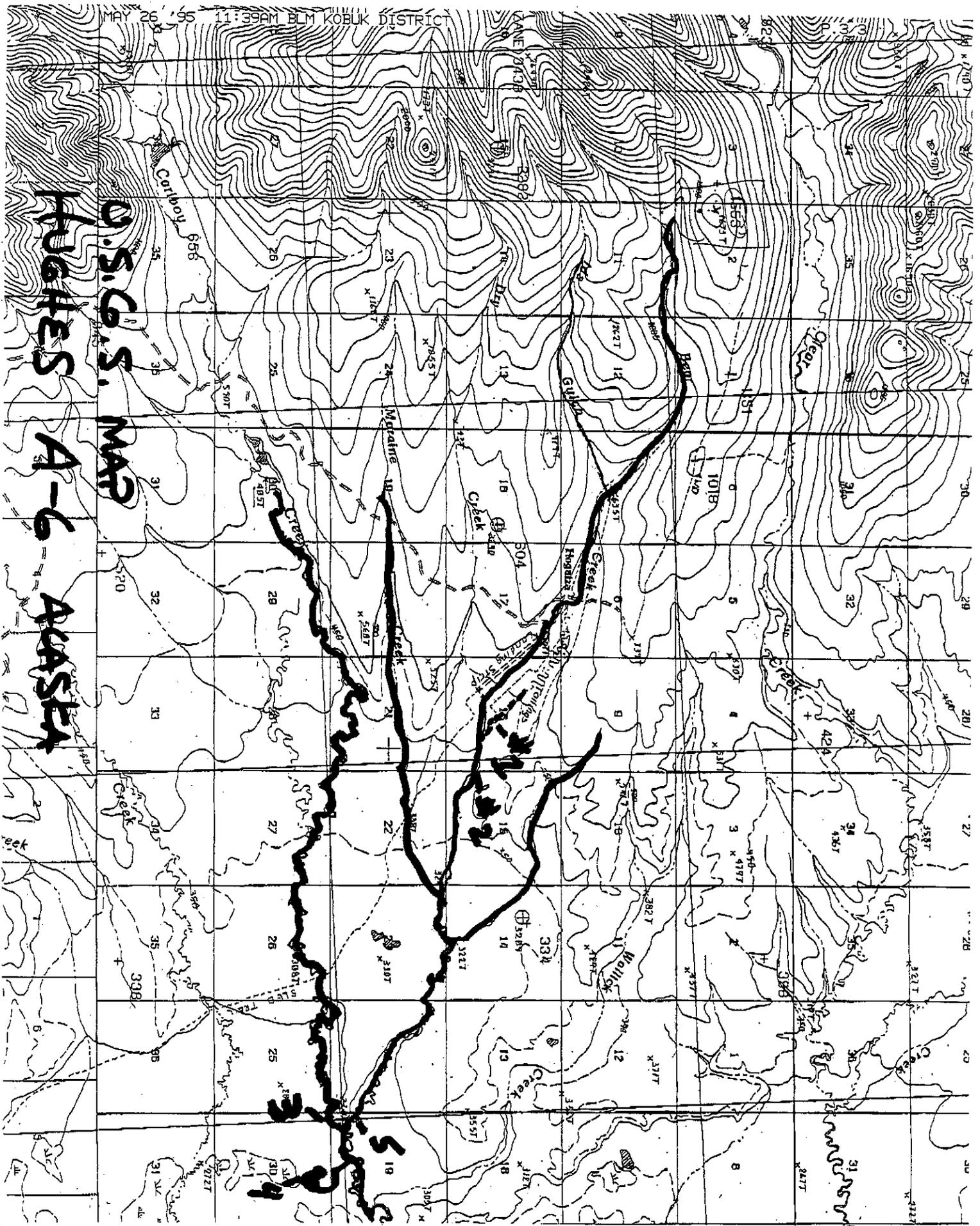
The following data was collected on July 3 on 4th of 1994. Sample site numbers correspond to the numbers on the attached map.

Site #	Site Name	Turbidity (N.T.U.s)	Flow (C.F.S.)
1.	Mine discharge water above above Bear Creek 7/3	302	.62
2.	Bear Creek, 600' downstream of mine discharge	38	16.
3.	Caribou Creek above Bear Creek	1.1	102
4.	Caribou Creek Below Bear Creek	9.0	102+33=135
5.	Bear Creek above Caribou Creek	18.5	33

If you have any further questions please give me a call at 907-474-2347. I'll be in the office off/on for the next two weeks then gone till the first of July.

**HUGHES
A-6
ARASA**

**D.S.G.S.
MAP**



ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
1992 STATEWIDE WATER QUALITY ASSESSMENT

NAME OF WATERBODY: Bear Creek
Location or Lat/Long: 66° 10' 155° 35' Hughes Quad
flows to Caribou Cr which flows into
Hogatza R.

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

Waterbody Type: River/Stream Lake Fresh Wetland Tidal Wetland Estuary Coastal Shoreline Groundwater
Waterbody Size: 2.8 Miles Acres/Hectares Acres/Hectares Acres/Hectares Square Miles Miles
Segment of Waterbody Addressed: From: Headwaters To: Caribou Cr Confluence w/ Hogatza
Other Description: _____
Size of Segment: _____

Period of Assessment, From: _____ To: _____

Type of Documentation (attach if possible):

- Water quality data
- Documented oil spill
- NOV / Enforcement action
- Photos with documentation
- Photos without documentation
- Written report
- Field notes
- Overflight
- Observation
- Other

Describe Source and Nature of Pollution, Documentation Provided and Other Comments:

Sediment from active mining
operations. Documentation includes
grab sample results and observations.
UBLM has also included Bear Creek in an
area designated as an Area of Critical
Environmental Concern per the attached
letter.

RESPONDENT INFORMATION:

Name: See cover memo Phone: _____ Date: _____
Employer: _____ Dept: _____ Title: _____
Address: _____
Education/Experience: _____

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
1992 STATEWIDE WATER QUALITY ASSESSMENT

NAME OF WATERBODY: Bear Creek

Location or Lat/Long: 16° 10' 155° 35' Hughes Quad
Flows to Caribou Cr which flows into
Hogatzee R.

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

Waterbody Type:	Waterbody Size:	Segment of Waterbody Addressed:
<input checked="" type="checkbox"/> River/Stream	<u>~ 8</u> Miles	From: <u>Headwaters</u>
<input type="checkbox"/> Lake	_____ Acres/Hectares	To: <u>Caribou Cr Confluence w/ Hogatzee</u>
<input type="checkbox"/> Fresh Wetland	_____ Acres/Hectares	Other Description: _____
<input type="checkbox"/> Tidal Wetland	_____ Acres/Hectares	_____
<input type="checkbox"/> Estuary	_____ Square Miles	Size of Segment: _____
<input type="checkbox"/> Coastal Shoreline	_____ Miles	_____
<input type="checkbox"/> Groundwater		

Period of Assessment, From: _____ To: _____

Type of Documentation (attach if possible):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Water quality data | <input type="checkbox"/> Written report |
| <input type="checkbox"/> Documented oil spill | <input type="checkbox"/> Field notes |
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| <input type="checkbox"/> Photos without documentation | <input type="checkbox"/> Other |

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Bear Cr

Bear Cr. (Hogback P.t.r.'s)
Traya Mining

Inspected 10-1-91

	SS	Turb	AS
Bear Cr. upstream from Dredge @ 13:00	NONE	0.37	?
Bear Cr. upstream from Caribou Cr. Downstream from Mine @ 14:10	NONE	130.0 NTU	?

*Bear***TYPE AND SEVERITY OF POLLUTANTS AND SOURCES: (Severity; H= High, M= Medium, S= Slight)****POLLUTANTS:**

- | | | |
|--|---|---|
| <input type="checkbox"/> 0 Cause unknown | <input type="checkbox"/> 14 Temperature Modifications | <input type="checkbox"/> 22 Noxious aquatic plants |
| <input type="checkbox"/> 1 Unknown toxicity | <input type="checkbox"/> 15 Flow alterations | <input type="checkbox"/> 23 Filling and draining |
| <input type="checkbox"/> 2 Pesticides: | <input type="checkbox"/> 16 Other habitat alterations | <input type="checkbox"/> 24 Total toxics |
| <input type="checkbox"/> 3 Priority organics: | <input type="checkbox"/> 17 Pathogens | <input checked="" type="checkbox"/> 25 Turbidity |
| <input type="checkbox"/> 4 Nonpriority organics: | <input type="checkbox"/> 18 Radiation | <input type="checkbox"/> 26 Exotic species |
| <input type="checkbox"/> 5 Metals: | <input type="checkbox"/> 19 Oil and Grease | <input type="checkbox"/> 27 Debris, foam, scum, etc. |
| <input type="checkbox"/> 6 Ammonia | <input type="checkbox"/> 20 Taste and odor | <input type="checkbox"/> 28 Insufficient stream structure |
| <input type="checkbox"/> 7 Chlorine | <input type="checkbox"/> 21 Suspended solids | <input type="checkbox"/> 29 Arsenic |
| <input type="checkbox"/> 8 Other inorganics | | |
| <input type="checkbox"/> 9 Nutrients | | |
| <input type="checkbox"/> 10 pH | | |
| <input checked="" type="checkbox"/> 11 Siltation/sedimentation | | |
| <input type="checkbox"/> 12 Low dissolved oxygen | | |
| <input type="checkbox"/> 13 TDS/Salinity/Chlorides | | |
| <input type="checkbox"/> 30 Other: | | |

SOURCES OF POLLUTANTS (Severity; H= High, M= Medium, S= Slight):**Point Sources:**

- 1 Industrial
- 2 Municipal
- 3 Storm sewers
- 4 Combined sewers

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 waste/holding areas
- 19 Manure lagoons

Silviculture:

- 21 Timber harvest
- 21 Stream restoration projects
- 22 Forest management
- 23 Road construction/maintenance
- 24 Elimination of stream thermal cover

Construction:

- 31 Highway/road
- 31 Bridge construction/repair
- 32 Land development

Resource Exploration/extraction:

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

Urban Runoff:

- 40 Surface runoff
- 40 Storm sewers

Waste Disposal:

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

Hydrologic Modification:

- 71 Stream 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

Other:

- 81 Atmospheric deposition
- 82 Waste storage tank leaks
- 83 Highway maintenance/runoff
- 84 Petroleum/chemical spills, leaks
- 85 In-place containments
- 86 Natural sources
- 87 Recreational activities
- 88 Upstream impoundment
- 89 Salt storage sites
- 91 Fire damage/restoration
- 92 Underground storage tanks
- 93 Aboveground storage tanks
- 94 Saltwater intrusion
- 95 Road salting
- 96 Fish, shellfish wastes
- 99 UNKNOWN SOURCE

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
1992 STATEWIDE WATER QUALITY ASSESSMENT**

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