Holgate (Onemile) Creek Field Recon Report, 4/26/05
ADEC NPS staff Lori Sowa, accompanied by:
Emily Cowles (Takshanuk Watershed Council, Haines), and
Ray Staska (retired ADF&G, Haines)
Weather: sunny and warm, ~65°F
Location: south of Haines

Background
Onemile Creek is currently in the ranking process for ACWA and is a source of local concern to the Haines community. Although the ranking results have not been finalized, both Fish and Game and DEC have ranked the water as high priority and the water will be placed in the Data Collection and Monitoring track. There have been citations issued in the past for 2 animal operations – one horse stabling operation and one dog kennel. The city conducted some water quality sampling for fecal coliforms in the past and found elevated levels. Ben Kirkpatrick, ADF&G biologist in Haines, walked the stream last week and noted significant bank erosion and manure in the area. It is believed that both operations may have ceased – but cleanup may be an issue. Failing septic systems are also suspected in the area.

The main purposes of this trip is to conduct initial screening on this water, which will include talking with the local community, taking pictures of the stream and potential nonpoint source issues, and taking some initial water quality readings, including basic parameters (DO, conductivity) as measured by the YSI85 and fecal coliform samples.

Observations
Onemile Creek is a small stream that is approximately 1 mile in length. This stream is formally known as Onemile Creek, but the community of Haines is trying to rename the creek "Holgate Creek" for the Holgate family, longtime residents along the creek who have been stewards of the creek, putting time and money into habitat rehabilitation.

Per conversations with Ray Staska, fish species present include cutthroat, coho (mainly rearing, few spawning), dolly varden, stickleback, occasional king salmon "visiting". The culvert under Mud Bay Road was replaced a few years back, baffles and gravel were installed to provide better habitat. ATV use used to be an issue on the flats (section of stream from Mud Bay culvert to the ocean) – strategic boulder placement has deterred this activity and it is not currently a problem. The stream forms a pond on the flats that is used for recreation (swimming, fishing) by local youths. This pond was closed a few years ago – the Borough posted a "polluted water" sign in response to failing septic systems upstream. Fecal coliform counts were "too numerous to count (TNTC)" in the creek at 2 locations. The sign was removed by the Borough after the failed systems were replaced.

Spoke with Betty Holgate, whose property encompasses both sides of the creek upstream from Mud Bay Road (See plat map attached). She gave us permission to be on their property. The Holgates have a pond on their property that acts as a sediment trap/settling pond. This pond used to be 4 foot deep, but has filled up completely since Small Tracts Road was constructed. Pulses of very turbid water have come through in the past. They would like to be able to dredge the pond periodically. They have done some stone work to improve habitat and fish passage ability as well.

In the past, the Holgates have had raw sewage in the creek in their backyard. This has improved since the failed systems referenced above were fixed, but they can still smell sewage on a regular basis. The last time they smelled sewage was last Fall.

A dog kennel previously located on the creek has closed; however, a humane society operation is planning to move into that area in the near future.

Water Quality Sampling

Water quality samples were taken at 5 locations along the creek, along with one duplicate. Three of the samples were taken at the same locations that were previously sampled by the Borough. Two more locations were sampled to get better coverage of the entire system. No other potential sources of fecal coliforms were observed with the exception of the Holgate's dog. The weather in the region was warm and dry for at least a week prior to this sampling event. Flow is assumed to consist primarily of snowmelt from higher elevations, and baseflow (spring or groundwater). Runoff from adjacent properties is not expected to be a major contributor to this sampling event.

Basic water quality parameters were taken using a YSI85. A new DO membrane was installed the night before sampling. The probe was calibrated to 100% air saturation before DO readings were taken. Fecal coliform samples were collected in laboratory-supplied, sterile sample bottles. The samples were put on ice in a cooler immediately after collection.

Although new batteries were installed in the YSI meter prior to use, the "battery low" signal came on partway through the sampling event, and then the instrument shut itself off. In talking with a YSI representative (after the trip was over) – the batteries were not the problem, the connections were corroded and needed to be "roughed up". The meter is now working properly. Data collected before the instrument turned itself off should not be in question.

Sample ID	Date	Time	GPS	Temp (°C)	DO (% sat)	DO (mg/L)	Cond (us/cm)	Fecal coliform (cfu/100mL)
Small Tracts Road culvert (upstream)	4/26/05	16:22	N59° 12.659' W135° 26.120'	**	**	**	**	16.7
"Twin culverts" along Small Tracts Road drainage	4/26/05	16:32	N59° 12.804' W135° 26.521'	**	**	**	**	60
Below tributary	4/26/05	15:35	N59° 12.720' W135° 26.603'	9.0	106.2	12.29	81.5	<3.34
Below tributary duplicate	4/26/05	15:42	N59° 12.720' W135° 26.603'	9.1	105.9	12.18	81.7	3.33
Upstream Holgate's property	4/26/05	15:26	N59° 12.689' W135° 26.692'	9.2	107.5	12.37	82.5	70
Mud Bay Road Culvert (upstream)	4/26/05	16:09	N59° 12.757' W135° 26.827'	9.5	110.9	12.43	84.5	117

** Data not collected, YSI85 was not functioning properly

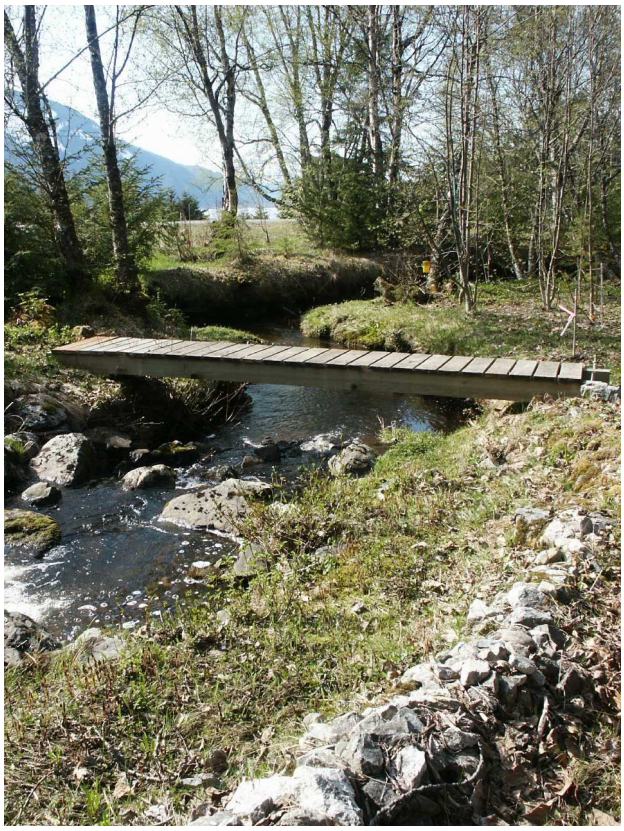
Recommendations

Holgate Creek should continue to be monitored for fecal coliform contamination. A meeting should be held with the Haines Borough to discuss historic contamination on the creek, and resulting actions (septic system overhauls, etc.) Residents should be encouraged to contact the Borough and DEC if they see or smell sewage in their yards.

Photographs

A number of photographs were taken to document stream characteristics and sample locations.

Lower reaches of Holgate (Onemile) Creek. *Top left* Photo of culvert on Mud Bay Road with habitat structure inside. *Bottom right* Unvegetated area, formerly site of ATV use.



Photos of Holgate Creek on the Holgate family's property. *Top right* Stone steps were added to the stream to improve habitat. *Bottom* Pond that has recently (over the last couple of years) filled in.

Sample location: Small tracts Road culvert. Most upstream sample taken on Holgate Creek,

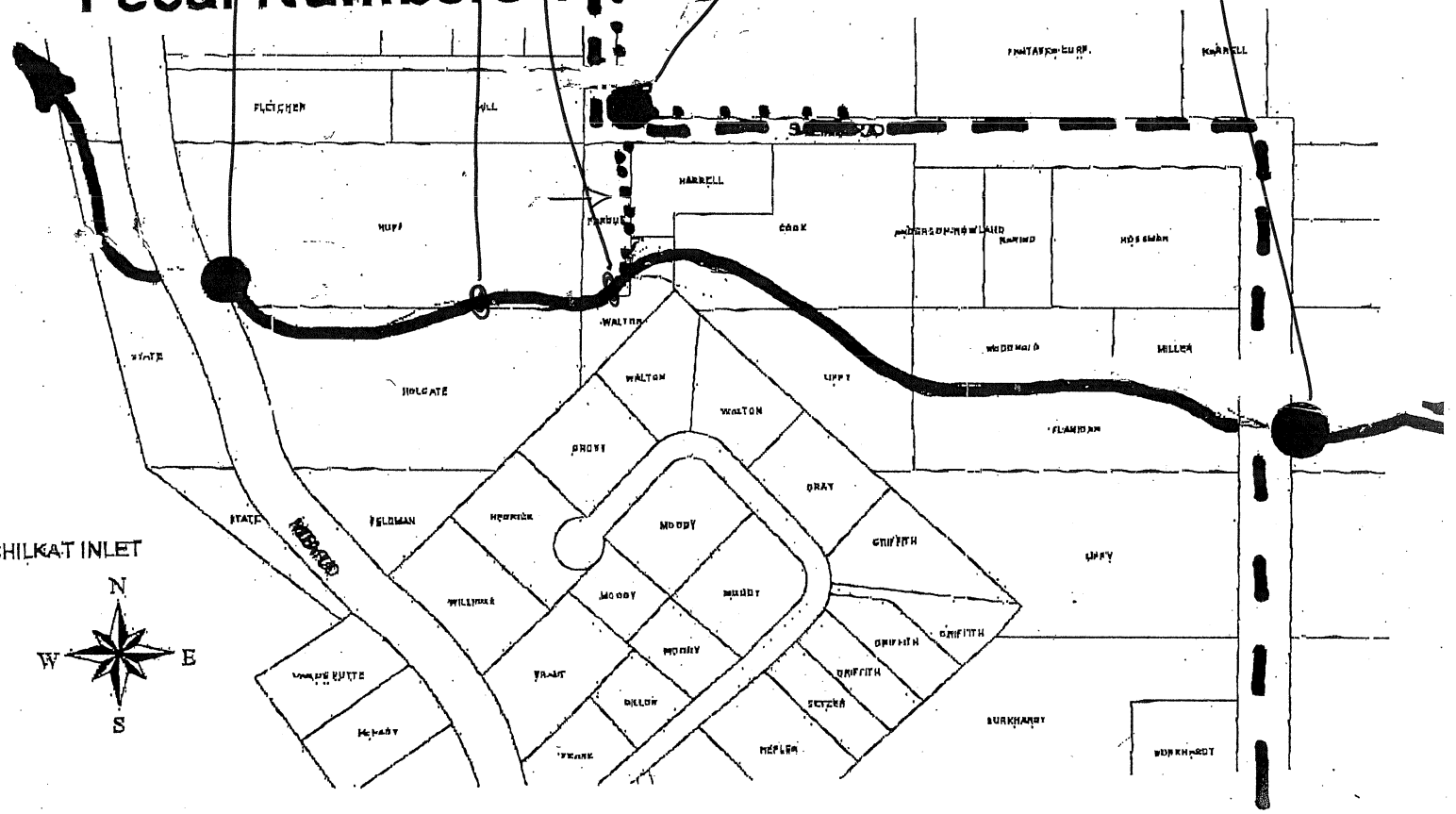
Sample location: "Twin culverts"

Sample location: Below tributary

Sample location: Upstream Holgate's property

Sample location: Mud Bay Road culvert (upstream end).

Fecal Numbers Taken on One Mile Creek



DEC sampling results for fecals 4/26/05

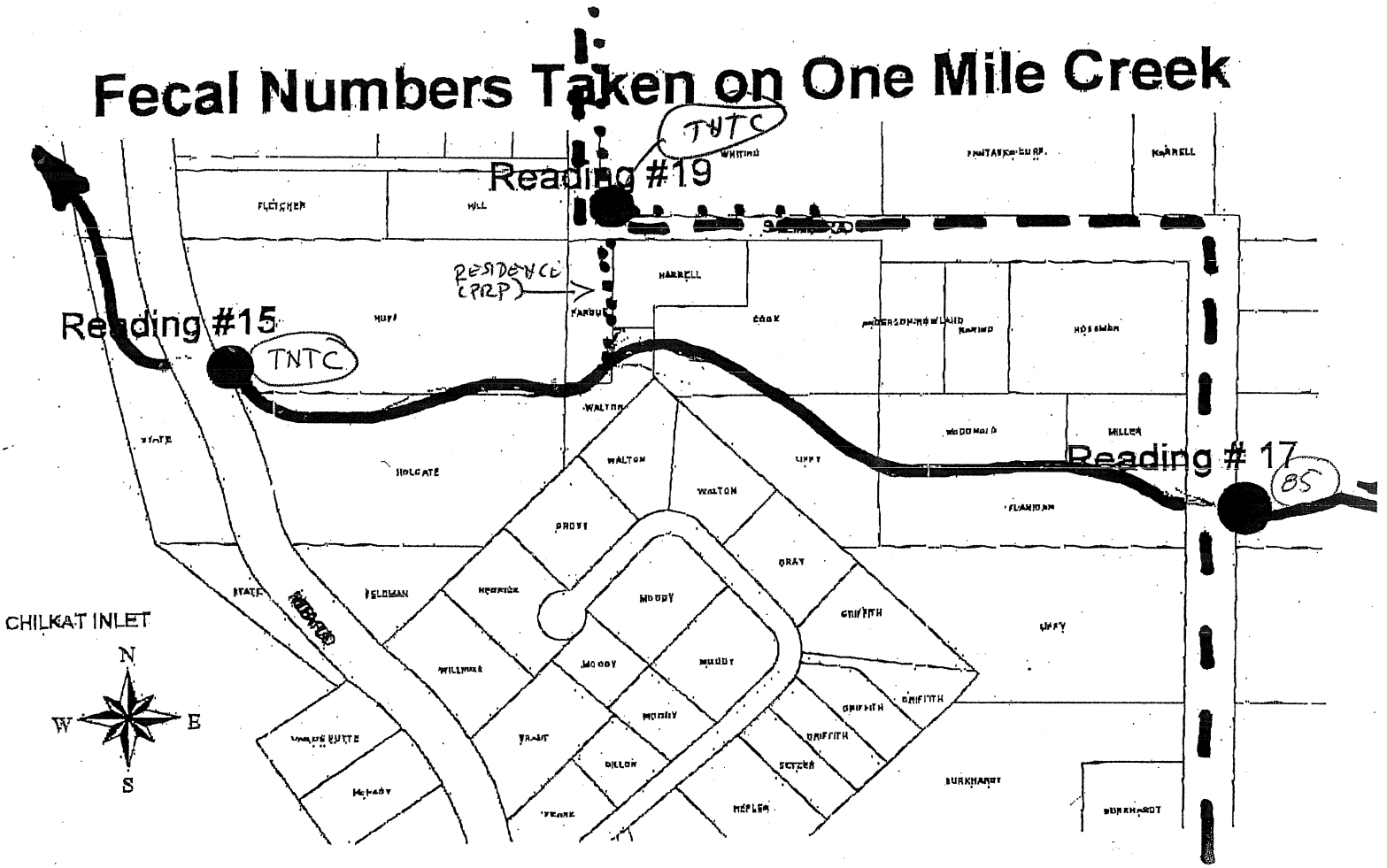
One Mile Creek (All are approximate)

Roadside Ditch

Small Tracts Road (Approximate)

2001 data ?
collected by Haines Borough

Fecal Numbers Taken on One Mile Creek



One Mile Creek

Roadside Ditch

Small Tracts Road (Approximate)