

# MEMORANDUM State of Alaska

**DEPARTMENT OF NATURAL RESOURCES \*\*\* DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS**

TO: Bill Long  
Chief, WRS

DATE: 15 Oct. 1990

THRU Roman Motyka   
Geologist

FILE NO:  
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SUBJECT: Skagway flooding

FROM: Rick Noll,   
Hydrologist

I traveled to Skagway on October first at the request of the mayor of Skagway to help the city evaluate erosional problems. These problems were caused by channel shifts in the Skagway River due to recent flooding. The Skagway River is not presently gaged, gaging was discontinued in September 1986. I traveled with Brett Jokela, a consultant with Montgomery Engineers. Montgomery was hired by the city to recommend and design a solution to the flooding problems. I have enclosed a copy of their letter and design for temporarily stabilizing the bank near the Whitepass oil product line. That line is a buried 14 inch pipeline that has been scoured out and is suspended for approximately 75-100 feet and was awash in the river at the time I was there. A Whitepass official told us that they had shut down the pipeline and were trying to minimize any potential for a spill. Montgomery designed a workplan that week for refilling around the pipeline.

The city council wanted to rechannel the river to keep it away from areas of the city that were being eroded by the river. Most areas that were eroding did not appear to have a proper revetment with rip rap placed to below the scour depth of the river. Where the city has repaired the dikes with material from a local slide area, this material is a mix of large boulders to fine grained material. The repair material is not sized, and it is not being placed in a way that will insure the bank will withstand another major flooding event. Flooding for this year is probably over, but a warm rain could melt accumulated snow in the upper river basin and produce another flood event this year.

Erosion is removing some fill in the river flood plain that was placed there illegally by a local gravel producer. DNR-DLWM is in negotiations with the owner of the gravel operation about how far back he will need to move his gravel sorting and storing operation.

↙ As far as solving the erosion problems, I recommended, along with the Montgomery consultant, that bank stabilization and not rechanneling was the best solution. There was concern by both the city and the Montgomery consultant that certain State agencies (specific Fish and Game) would not allow bank stabilization without some type of agency review. I agreed to work with the city of Skagway and other State agencies as needed to expedite the bank repair around the Whitepass product line.

cc: Chris Landis  
Rod Combellick