



# SIMS & ASSOCIATES

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August 14, 1979

Mr. Ken Holman  
Alaska District  
P.O. Box 7082  
Anchorage, Alaska 99510

Re: Chena River FloodControl Project  
Final Stage

Dear Ken:

After our Water Board meeting in Fairbanks, a few more questions have come to mind concerning the above project. These are my personal questions and comments, but I am sure the Board will find them helpful since we did take action based on the testimony we heard.

As you may recall, we spent considerable time, while at the existing end of the levee, discussing the possibility of extending the levee directly to the airport property, and thereby eliminating the need to cross the river. As I recall, the objections to this route were;

1. The FAA would lose some instrument approach capability for a period of time.
2. The Borough would have to maintain a pumping station at a cost of \$80,000 to \$100,000 per year.
3. The airport did not want a levee across the south end of the airport because of future expansion.

All other objectives of the project would be met with this design as I recall.

With this in mind, and assuming I have accurately stated your presentation, would you please comment on the following suggestion.

1. Extend the existing levee (westerly) to join the airport property.
2. Discontinue the levee across the airport property.
3. Install a smaller levee (nearly as proposed) connecting the opposite side of the airport with the mouth of the Chena river.
4. Do not install the pumping system to drain the existing bend in the river, but instead turn it into a sanitary land fill area.

On the surface, and a non-professional point of view, this would carry the following advantages and disadvantages:

Advantages:

1. The two crossings of the Tanana would be avoided, and subsequently the possible impact of diverting the Tanana eliminated.
2. The Alaska Railroad would be protected.
3. The possibility of lowering the Chena would be eliminated.
4. The operation of the airport should receive minimal interruption. From personal experience, I am certain that the FAA has the personnel and equipment to make the required adjustments to the instrument approach system stationed in Alaska. Changes in land (or water) mass do affect the radio transmissions, but this is not a new problem when you consider the FAA maintains systems in the state that are subject to tidal fluctuations.
5. The expense to the Borough to operate the pumping station would be eliminated. (\$80 - 100,000 per annum).
6. The extension of the Borough's sewer outfall would probably be shorter.
7. The Borough would gain a dumping area and eventually some land.

Disadvantages:

1. The levee height would not be maintained for that portion that would have crossed the airport property. I do not know the elevations involved, but the information we received indicates that the high ground in the area is the airport property. Since the last flood did not reach the airport and that flood was the equivalent of a 350 year flood, it appears that the risk would be minimal. It is possible that an emergency plan could be adopted by the Borough or State to build a temporary short levee in place across the airport should a higher flood (than 350 year) be projected.
2. The local economy may receive less of a boost as a result of the reduction of the size of the project.

If you would please respond to these thoughts, I will be sure to get them out to the Board.

Again, thank you for all your courtesies shown us during our visit.

Sincerely,



Richard H. Sims, Chairman  
Alaska State Water Resources Board

cc: Board members  
DNR