

QFH/cp
5 Dec '51

NPSCEP

824.1(Skagit Rv & Tribs)10

7 December 1951

Mr. Bert Heggen
Route 1
Mount Vernon, Washington

Dear Mr. Heggen:

During your visit to this office on 4 December, you expressed the fear that the rock revetment recently constructed by the City of Mount Vernon on the left bank of Skagit River would have the effect of increasing flood heights in the Avon-Burlington area. You were promised at that time that a study would be made by this office and the results furnished to you. That study has been made and the results clearly demonstrate that the work of the City does not affect flood stages upstream in any measurable degree.

The area of Skagit River high-water cross section at Mount Vernon is 20,000 square feet. Of that area the City fill occupies less than 150 square feet, or only three-quarters of one per cent. It is obvious that such a minor encroachment on the river channel will have a negligible effect on the carrying capacity of the stream and, therefore, on upstream stages. A study of the profiles of the 1949 and 1951 floods confirms this. In the flood of November 1949, at which time the river discharge was 114,000 c.f.s., the river stage at Avon was 31.7 feet. In February 1951, with a discharge of 145,000 c.f.s. (or 127 per cent of the 1949 discharge) the stage at Avon was 34.3 feet, or 2.6 feet higher than the 1949 stage. That 2.6 feet rise in stage can be explained entirely by the higher discharge of the 1951 flood, and it is estimated would have reached the same elevation even if the City fill had not been made.

In view of the facts presented in the preceding paragraphs, I am sure that the districts upstream from Mount Vernon have no occasion to fear any adverse effects from the work performed by the City.

A copy of this letter is being sent to Mr. H. O. Wahlberg, County Engineer, because of his interest in flood control of Skagit.

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NPSOP
Mr. Bert Heggen, Mount Vernon, Washington

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River. If you have any further questions regarding this matter, please feel free to call at or write to this office.

Very truly yours,

JOHN P. BUEHLER
Colonel, Corps of Engineers
District Engineer

cc: H. O. Wahlberg
County Engineer
Skagit County
Mt. Vernon, Wash.

Planning & Reports Br.

Hopkins
Buehler MB
Saw Draft.
Brown S.S.
Wright AW
Buehler /s/
M & R