Soil Conservation Office Submits Flood Damage Report for County

Seventy farm houses and buildings in Skagit county were washed out or damaged severely by the Skagit river flood November 27 through December 29. Paul C. Dickey, district soil conservationist, reported this week. Cost of rehabilitating the buildings was estimated at $160,000. The soil conservation office estimated cost of all damage except crop losses due to the flood at $56,965.

Additional losses to farmers which were not listed and which could not be ascertained at this time would bring the over-all loss caused by the flood to $1 million, Dickey said.

The soil conservation report stated that 14,765 acres of land in the county were inundated during the flood, and 2700 feet of dikes were washed away.

The Reconstruction Finance Corporation is accepting applications for loans to assist farmers who have had their land or buildings damaged. Applications are now available at the Bingham bank here. Additional information about the loans is given in another article in today's paper.

Dickey said that Roy Tuttle worked with the county engineer during the entire flood emergency, and other members of the soil conservation staff, including Richard Adlard, Norm Omdel and A. A. Summers patrolled flood areas and helped the emergency crews hauling sandbags.

The full report of flood damage in Skagit county compiled by the soil conservation department and submitted by Dickey and Earl Fulkerson, engineering specialist, follows:

"This flood was caused chiefly by sudden and heavy rainfall, augmented by quick melting of new snow on the mountain slopes. During the three days' previous to the flood, moderate rains fell and this was added a popularly reported four inch precipitation during a 24 hour period on November 27 and 28.

"This raised the Skagit river to flood stage from Marblemount to the mouth of the stream. The resulting flood covered an area of 14,765 acres, which area was inundated to depths varying from a few inches to 12 feet. More than 10,000 acres of this total was cultivated land or rotation hay and pasture. The remainder was mostly brush land.

"Actual soil loss was very small on lands where ground cover was established at the time; for instance, hay stubble, pasture, seeded grain with growth started, or green manure crops, protected the land pretty well. Some of the bare land washed moderately. In a few cases a deep scouring occurred or limited areas. Generally this occurred where water poured over a high dike.

"The peak flow of the Skagit river, according to the gauge at Mount Vernon, was 132,000 cubic feet per second. This is the highest flood since 1921.

"The cause of much of this flood damage is simply that the water rose to a greater height than the farmers had prepared dikes for, and that too many of the dikes were not of sufficient cross sec-


tion to withstand a flood that remained high on them for any considerable time. This was a quick flood. Probably there would have been much greater break-through if the river had remained high over an extended period.

"A detailed list of damage items follows:

Top soil loss—very little.
Deposition—from 1/2 inch to 8 inches over an area of 222 acres.
Streambank and gulley erosion very small—limited to a few small deep holes of scour-type erosion on fields adjoining river.
Inundation—widespread, totaling 14,765 acres of which 10,337 acres were cultivated land and 4,228 acres were brush land. Estimated cost of rehabilitation $60,000.
Dike washed out—2700 feet with direct cost of replacement estimated at $14,500.
Miscellaneous Damage
Farm houses and buildings washed out or damaged severely—70. Cost of rehabilitation—$160,000.
Pasture reseeding—$547.50.
Stock loss—8 head. $1250.
Road repair—3.5 miles. Cost—$3,000.
Bridges—5. Cost—$7500.
Total of these and other miscellaneous items $175,875. Total estimated cost of all damage except losses due to extended inundation is $505,965.

Photographs were taken by Anton Harms covering the flood area.

Dikes should be raised and greatly strengthened to prevent a recurrence of flooding that might very easily be disastrous under conditions less fortunate than existed this time."

Signed:
PAUL C. DICKEY,
District Conservationist.

EARL FULKERSON,
Engineering Specialist.