THE MOUNT VERNON ARGUS

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Skagit's Runoff To Be Heavy, Say City Light Aides

Snow 16 Per Cent Heavier On Upper River Than in 1948 Record Fall

An all-time record spring runoff is expected from the upper Skagit river for the April-August period, I. L. Cottom, assistant superintendent of Seattle's City Light, announced here this week.

Snow surveys indicate 16 per cent more snow, on a water content basis, than last spring when a 40-year runoff record was broken.

DIKE MAINTENANCE ADVISED

A prepared statement from City Light promised as much control of spring and high water as possible from its Diablo and Ross dams, but advised "construction of and a high degree of maintenance of diking facilities" on the lower river.

The statement left by Cottom and E. C. Brudage, administrative analyst in charge of Skagit water records, was as follows:

OUTLOOK FOR 1949 SPRING RUNOFF

Snow surveys completed on April 1, 1949, through the cooperative efforts of the United States Geological Survey, the Dominion Water and Power Bureau of Canada, the Forest Service and Soil Conservation Service of the United States Department of Agriculture and the City of Seattle indicate that the amount of water contained in the snow cover in the upper Skagit river is about 16 percent greater than there was at the same time in 1948. The anticipated runoff of the upper Skagit river at Diablo dam during the period of snow melting, April 1 to August 31, will be 16 percent greater than during 1948 and 37 percent greater than the 40-year average for the period.

REVIEW OF 1948 SPRING RUNOFF

During the period May 24 to June 12, 1948, the natural flow of the Skagit river at Diable dam maintained daily flows ranging from 16,000 to 32,000 cubic feet per second, which is the highest spring runoff of record at that point on the river. Due to the large storage capacity of the Ross Reservoir, the City of Seattle was able to store the greatest amount of the runoff and the flows actually released at Diablo dam during this period ranged between 2,500 and 8,000 cubic feet per second. Actually 78 percent of the total runoff at Diablo was impounded in the City's reservoirs during this period, which reduced the average flow in the lower reaches of the river by 18,000 cubic feet per second.

RIVER HELD TO STAGE OF 20.3 FEET

Between June 9 and June 12 the Skagit river was at or near the 20-foot stage at the county gage at Mount Vernon, and reached an observed peak stage of 20.3 feet at 7:15 p. m. on June 10. The operations of the City's dams at this time resulted in a net reduction of 211,800 cubic feet per second in the natural flow of the river. Assuming that one-third of this flow, had there been no regulation, would have been absorbed in valley and channel storage such as the Nookachamps basin, there would still have been 14,000 cubic feet per second greater flow in the Skagit at Mount Vernon, which would have resulted in a river stage of 22.3 feet instead of the 20.3 feet which actually occurred.

Those people in the lower valley who are vitally affected by the higher stages of the river can readily see that the reduction of the river stage at Mount Vernon from 22.3 feet to 20.3 feet servoirs to effect, to as great an extent as is possible, the reduction of peak flows in the lower river. Because the expected runoff is greater than last year's, it is believed that it will exceed the capacity of the reservoirs by a considerable amount. Because of this, the City is now releasing water from the reservoirs in excess of the amount required for power so that the necessary release of water at a later date may be reduced when the river is at its higher stages in the Concrete-Mount Vernon area.

WORST FLOODS HAVE OCCURRED IN WINTER

The city of Seattle in describing the effect of the operation of its reservoirs on the flows in the lower river does not wish to convey a false feeling of security against floods in the lower Skagit valley. The most damaging floods have practically always occurred during the winter period from the middle of October to the middle of March. It is desired to emphasize the fact that during winter floods, such as occurred in February 1932 and December 1921, the contribution of the upper Skagit river to this type of flood, ranges between 15 and 18 percent. Therefore, even complete regulation of flow in the upper Skagit could only effect peak flows in the lower river by 15 to 18 percent. Until such time as large storage facilities are available on the lower tributaries of the river, such as the Cascade, Sauk and Baker rivers, the possibility of damaging floods in the lower Skagit valley will continue to exist. According to the engineers who have studied the Skagit river flood conditions, the best assurance of minimum flood damage can be secured by the construction of and a high degree of maintenance of diking facilities.

This statement by the city of Seattle, department of lighting, has been issued in order to inform the residents of the Skagit river valley of the flood control service that has been and will continue to be rendered by the city in the operation of its hydro-electric projects and reservoirs located on the upper reaches of the Skagit river.