ture by seepage. This process takes a long time and generally keeps a steady supply of water flowing into the streams all summer long. In effect it acts like a huge reservoir, giving up its contents during the growing season when it is most wanted. The "humus" acts in a similar manner with rain that may fall during the summer.

Again, when the humus has soaked up its fill and the water starts to run off over the surface of the ground, the roots and trunks of the trees so retard its speed that it cannot assume flood proportions. The roots hold the soil together so that the little streams cannot wash it away. This causes floods which wash down the soil and rocks into the valley bottoms, silt up farm lands and in some cases has been known to cover an orchard five feet deep in rocks and gravel. When the snow stops melting the run-off is over, but the damage has been done. No further water can be hoped for from that watershed unless there comes a rain and in that case the run-off will be just as quick and the benefits just as problematical.

The Forest Saves Money.

In all cases where a watershed is tapped for water for irrigation, reservoirs have to be secured. These need only be small in the case of well wooded watersheds on account of the steady flow of water into them as mentioned above. In the case of denuded watersheds, reservoirs have to be of a huge size to hold sufficient of the spring floods to last all summer. This necessitates great outlay of money and there is constant expense on account of the washing down of earth and rocks and the consequent filling up of the reservoir. Luckily, no such problems are presented in the Okanagan.

The foe to fertile valleys. This recent photograph shows an almost total obliteration of the valuable forest cover in the Okanagan Valley of British Columbia. View taken from Kathleen Mountain, looking west.

and so we have absence of floods and pure clear water coming down into the creeks and rivers in the spring.

When Trees are Absent.

Now consider what happens on a watershed that has been denuded of trees by fire or other cause. These effects have all been actually observed to be the result of forest denudation in different parts of the country. The snow melts quickly in the spring, as it is not sheltered in any way from the sun. The bare mineral soil has very poor absorptive qualities and can soak up little of the water and so the bulk of it must run off over the surface in a very short time.

Fires are the main cause of the forest denudation and in several cases the flow of creeks in the Okanagan has been observed to become less regular with more flood water in the spring and