

MONTANA

Farmer-Stockman

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Over-all view of some of the wet land in Montana that needs drainage. This picture was taken near Lowry, Mont. Weeds, willows and undesirable grasses are the principal vegetation.

70,000 Acres Salvaged

Drainage Ditches Open New Frontier

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NEARLY 40,000 ACRES of land have been drained by systems built by farmers and ranchers in Montana soil conservation districts. This has involved 1,500,000 cubic yards of excavation. Sixteen thousand acres of the drainage was accomplished last year and SCS technicians are doing the technical work preparatory to drainage of some 30,000 acres more, at the request of district co-operators.

One of Montana's Biggest Jobs

Significance of these figures is that they are a start on one of the biggest jobs Montana faces today.

Here is what drainage has meant to some of the farmers and ranchers.

Harvey Naslund near Chinook, co-operating with the Paradise soil conservation district, has a 35-acre irrigated field that in 1949 produced a good wheat crop, on land first drained in 1948. For the 10 previous years that he had been on the farm, he said, this field had produced only a little grass. It wasn't even fair pasture.

Near Belgrade, Frank DeHaan, co-operating with the Three Rivers soil conservation district, is operating a good livestock enterprise on land that was swampy and produced only rushes and sedges until it was drained. His father, a farmer in the Holland settlement area, bought the land and, together with his neighbor, the Spain brothers, built the drainage ditch. Feed crops and high quality forage grasses are being seeded there now.

Swamp to Hayland

Six farmers along Crow creek near Toston, co-operating with the Broadwater county soil conservation district, teamed up to get rid of the excess water that kept the land soggy. This land was pastured somewhat, but hay could not be cut. The pasture is improving now with the natural increase

in the better quality forage grasses, and the farmers are harvesting hay there, also. Three of them—George Rouser, Robert Barrington and Maurice Ferrot—now irrigate land with the drainage water.

Roy Rammell near Fort Shaw, a co-operator with the Sun river soil conservation district, has 300 irrigated acres that now produce good yields of potatoes and other crops where previously he could grow little. A relatively shallow ditch along the lower side of the and has lowered the water table enough to reclaim this land. Soil conservation service technicians helped plan the drainage, and the reclamation service helped build it.

Drain to Irrigate

Having to drain land in order to be able to irrigate it may seem a paradox to many people. But the fact remains that even in this low-rainfall country, where irrigation is practiced, the ground water level is so high in many places that only sedges and other low quality vegetation can grow. Besides this, a high water table often brings salts to the surface.

Not all wet lands are suited for drainage. Some cannot be drained, and some are too poor to justify the expense. The drained lands and nearly all that are classed as suited for drainage are potentially of high quality. Some are wet because of natural seepage from higher land to stream courses, particularly from the mountains. Others suffer the consequences of over-irrigation or seepage from irrigation canals. On many, there is a combination of the natural and man-made causes. In still other instances, stream over-flow causes the trouble.

Requirements Vary

Deep drains are required to lower the water table at some places, but at others, surface drainage alone will meet the situation. Some

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—Photo by Soil Conservation Service
Cause and result. The slough in the upper picture rises and lowers with the water table. At the time this photo was taken in June, 1949, the water table was near the surface; test wells in the area confirmed what the slough showed. The lower picture shows a few remaining alfalfa plants on what is described as having been a good field of alfalfa. The high water table has caused nearly all of the plants to die. This picture was taken on Pease Bottom near Hysham, Mont., in the Treasure county soil conservation district.



Two views taken June 30, 1949, at the Harvey Naslund place near Chinook. The wheat in the top picture is on a field where the drainage system was built in 1948. Previously during the 10 years he had lived on the farm, Naslund said, this land was so seeped that it produced only a little grass—"it wasn't even fair pasture." The banks of the main drain can be seen in the background. The lower picture shows the main drain, which is separated from Naslund's land only by the width of the road. Naslund is co-operating with the Paradise soil conservation district.