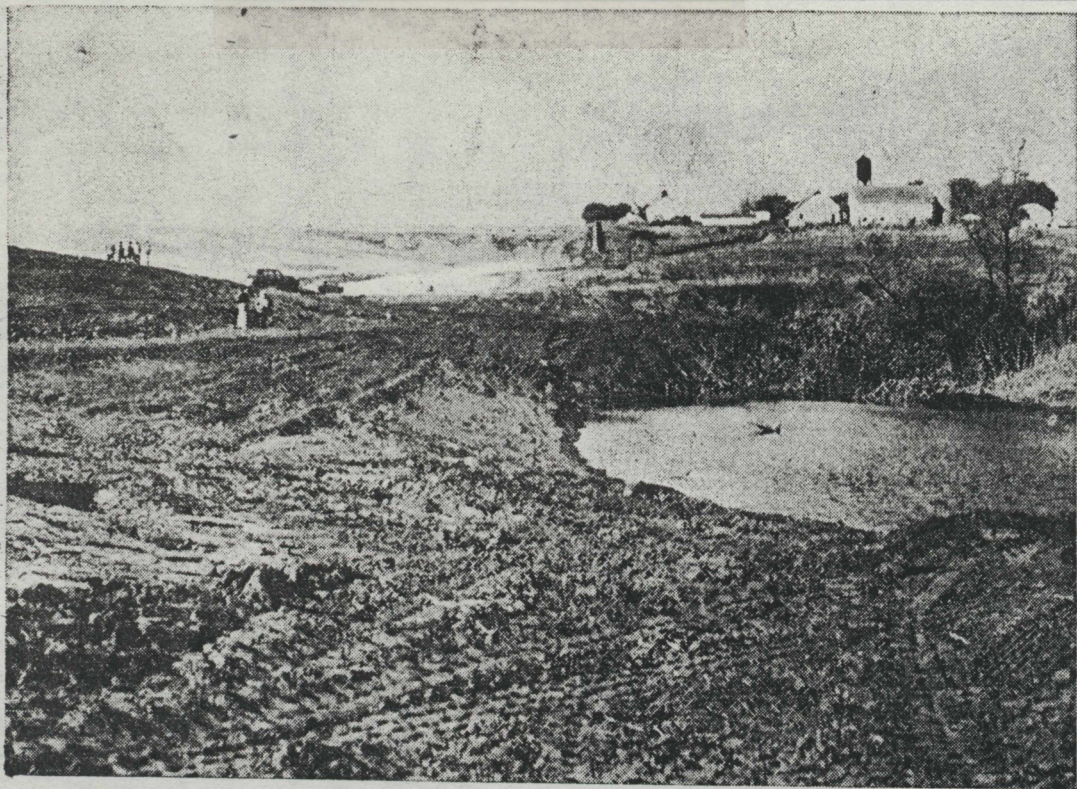




Intake For The Drop Inlet . . . in the County Farm structure is inspected by County Supervisor Ivan Olsen and Verl Arnold of the SCS office. Beginning of the farm pond which will be impounded behind the dam can be seen at left. County Home buildings are in the background.

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Southwest Iowa Scene

County Home Farm Structure Previews Things To Come

By C. W. McMANAMY

McCLELLAND — A preview of things to come is to be seen in the gully control structure just being completed on the County Home Farm near McClelland. Such installations are bound to become more and more common as the watersheds conservation program gains acceptance.

For many years now an ever-growing gully has been gnawing away at the land on the farm. Engineers estimated that the gully proper had encompassed between seven and 10 acres of good valley bottom land. The growing gully was also threatening to cut the farm in two and isolate a large section of the ground.

County supervisors took counsel with technicians and engineers from the local Soil Conservation Service office. Since a high percentage of the 380 acre watershed, which drained into the upper gully, was being farmed under conservation practices the service recommended the major control structure.

Explain Use

The dam, which is expected to bring the upper reaches of the gully under control and also exert a definite influence on downstream control, is a large one as such structures go.

Running about 900 feet long the dam stand on a 300 foot wide base sloping to a 12 foot wide top to allow vehicle crossing. It measures about 45 feet deep at the center line and running through beneath the dam is 200 feet of 26-inch pipe. This is the drop inlet tube which will carry off excess water in times of extremely heavy rainfall. This pipe is fed by a vertical concrete inlet 10 feet deep and three foot by three foot square.

The dam contains some 20,000 cubic yards of dirt. It was designed and work was supervised by SCS engineers. Actual construction was handled by William Rodenburg Company of Minden. Cost to the county will be \$7,500.

Can See Effects

The effects of the dam can already be seen in the pond of water which has started to back up behind the structure. This will mean in turn that upstream gully deepening from overfalls and velocity cutting will cease. Cessation of such cutting action will allow for banks of the finger gullies to be pushed in and such areas stabilized in a grassed waterway. The long-range plan calls for the entire upstream section of the gully to be handled in a like manner with a 120 foot wide grassed waterway to take the place of the present ragged gully.

Since the valley does contain several natural springs it will be necessary to carry down seep water in tile lines which would empty into the overflow tube at the dam. Two such lines are in place now in the dam itself. These pick up any seepage from sides of the structure and carry it through to the downstream side avoiding possible failures in the body of the dam.

Pottawattamie County supervisors, Farm Superintendent Ira Haines and SCS representatives inspected the completed structure late last week.

"Looks like a pretty big undertaking but we are satisfied that both the farm and the surrounding community will benefit a great deal from it," said Supervisor Mervin Knott.

Brokman Land Adjoins

Because of a large side gully which runs down almost exactly on the property line and which had to be behind the dam an arrangement was worked out with Donald Brokman, whose farm adjoins, to the end that the dam was constructed slightly downstream. Engineers pointed out that since the downstream flow of water will now be completely controlled any increasing damage to the Brokman farm from the gully will also be largely alleviated.

The small watersheds program now being advocated by many conservationists contemplates the organization of farmers affected by large gullies and creeks into watershed groups.

Such a group, with the co-operation of the government would then move toward construction of gully control structures such as the one



The Outlet . . . of the overflow tube on the downstream side of control structure County Farm is inspected by county supervisors and SCS engineers.—Nonpareil PH