

RESTORING SURFACE-MINED LAND

By the U.S. Department of Agriculture

INTRODUCTION

A power shovel as big as an office building bites into the earth, piling up row on row of rock and soil to get a vein of coal. . . .

An auger with 7-foot bit bores into a hillside, and coal works its way out like wood shavings. . . .

A floating barge dips its big chain-bucket into a streambed for a load of sand and gravel. . . .

An ore-laden train snakes its way out of a giant open pit. . . .

Through these and other operations man carries on the big activity of surface mining. He gets many minerals, fuels, and building materials that help our Nation grow and that provide jobs in rural America.

In the process, the land is changed—laid bare, rearranged into parallel ridges, or scooped out like a soupbowl. Properly treated and managed, it can be returned to safe and productive use, even become a greater asset to the community than it was before mining. Left alone, it may produce only stream-fouling sediment and acid and ugliness.

For many years the U.S. Department of Agriculture (USDA) has been helping private-land owners restore their surface-mined land as part of their regular programs of wise land use and conservation treatment. USDA also has done restoration work and research studies on the public land it administers. Its experience and skills range all the way from preplanning mining to prevent offsite damage to development of a mined area for highly intensive uses.

Through studies and experience and through participation in the 2-year National Surface Mine Study under Public Law 89-4, USDA has gathered a great deal of information about surface-mined land conservation progress and needs. In this report highlights of the data are given as well as ideas for future action, suggested by research and experience, that can speed restoration of the surface-mined land that is intermingled with farm, ranch, forest, and other land in rural and suburban America.

Surface-mined land—by States.—An estimated 3.2 million acres of land—some in every State—had been disturbed by surface mining by January 1, 1965 (tables 1, 2).

TABLE 1.—LAND DISTURBED BY STRIP AND SURFACE MINING IN THE UNITED STATES, BY COMMODITY, JAN. 1, 1965¹

[In thousands of acres]

Mineral	Strip mining			Into hillside	Quarry-open pit below ground level	Total	Dredge, hydraulic, and other methods	Grand total ²
	Contour	Area	Total					
Coal ³	665	637	1,302					1,302
Sand and gravel.....	38	258	296	82	371	453	74	823
Stone.....	6	8	14	100	127	227		241
Gold.....							191	203
Clay.....	10	26	36	22	44	66	7	109
Phosphate.....	28	49	77	13	93	106		183
Iron.....	7	31	38	30	96	126		164
All other.....	11	12	23	59	81	140		163
Total.....	765	1,029	1,794	307	815	1,122	272	3,188

¹ Acreage by method of mining estimated from random sampling survey.

² Compiled from data supplied by U.S. Department of the Interior; from Soil Conservation Service, U.S. Department of Agriculture; and from estimates prepared by the field study group.

³ Includes anthracite, bituminous, and lignite.