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FEDERAL LAND RECLAMATION IN THE DUST BOWL

R. DOUGLAS HURT

NATIONAL LAND-USE PLANNING

In the spring of 1932, dust clouds swept over portions of the southern Great Plains. For the next six years, drought and the prevailing winds wreaked havoc over fifty million acres across northeastern New Mexico, southeastern Colorado, western Kansas, and the panhandles of Texas and Oklahoma—an area known by 1935 as the Dust Bowl. Much of that acreage was submarginal—land that, given the price of wheat, did not merit cultivation—and it was easily windblown. Tillage with one-way disk plows pulverized the powder-dry soil, and the nearly constant winds blew and drifted it across crop and grasslands. During the remainder of the decade, the United States Department of Agriculture (USDA) and other

government agencies struggled to halt wind erosion and to restore the land in the Dust Bowl.¹

Their work mandated the development of a federal land policy that would enable government officials to help farmers reclaim their wind-eroded lands. Recognition of the need for a new federal land policy, however, was not new. For nearly a decade social scientists, such as L. C. Gray in the Bureau of Agricultural Economics of the USDA, had urged a comprehensive land-use program that would remove submarginal land from production to help solve the joint problems of surplus production and soil erosion. And in 1931 Gray influenced the Hoover administration to call a national conference on land utilization. When the delegates from the land-grant colleges, farm organizations, and the federal government met in Chicago in November, they too called for a national land-use program that included the federal purchase of submarginal lands.²

The work of the national conference on land utilization bore fruit in 1932 with the formation of the National Land-Use Planning Committee, which Gray served as executive secretary, and which worked for the removal of submarginal lands from production. With the election of Franklin Delano Roosevelt to

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the presidency that year, land-use planning continued with the creation of the Land Planning Committee of the National Resources Board, which called for a long-term land-use policy that would remove as many as seventy-five million acres from cultivation nationwide. It also concluded that "extensive areas" of the Great Plains were unsuited for cultivation. The Committee estimated that more than 6.5 million acres in the Great Plains needed to be returned to grass and that some 16,000 farmers should be relocated.³

About this same time, Chester Davis, administrator of the Agricultural Adjustment Administration (AAA), created a Program Planning Division that, with the support of Secretary of Agriculture Henry A. Wallace and others, he used to give government social scientists the opportunity to plan and implement a national land-use program. Gray

became chief of the Land Policy Section of the Program Planning Division while remaining head of the USDA's Division of Land Economics within the Bureau of Agricultural Economics. He, therefore, had major responsibility not only for developing a long-term land-use program but also for determining the submarginal lands for purchase and reclamation. As chief of the Land Policy Section, Gray also had the opportunity to implement the suggestions that had accumulated from the Division of Land Economics, the National Land-Use Planning Committee, and the Land Planning Committee. Soon, Gray's Land Policy Section became the nerve center for planning the land-use program.⁴

Gray and others believed that a land-use program was needed in the Dust Bowl to enable acquisition of submarginal lands, consolidation of farms, relocation of inhabitants,

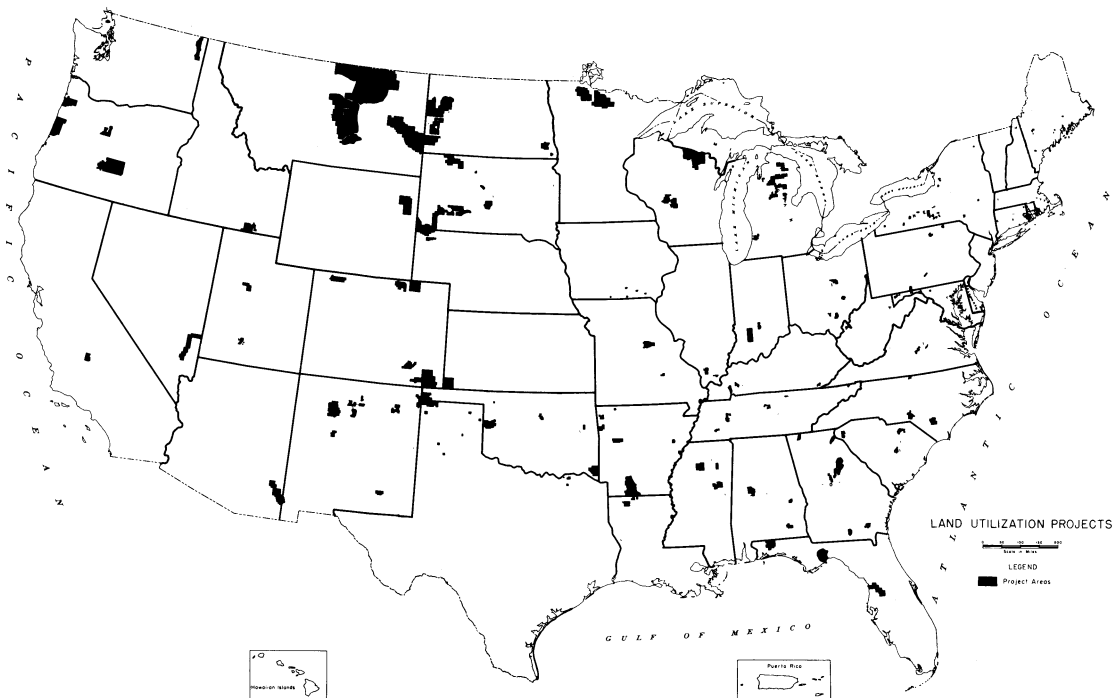


FIG. 1. The land utilization projects were part of the Roosevelt administration's national soil conservation program. By November 1940, land reclamation encompassed several hundred thousand acres in the Dust Bowl. Other land utilization projects were scattered across the nation. Courtesy Soil Conservation Service.

restoration of land, and the return of reclaimed land to commercial use under the watchful eye of the federal government—all for the purpose of restoring submarginal cropland to grass in order to help end the dust storms and improve agriculture. Although the intent of federal land reclamation policy was clear, execution became difficult because it required private owners to sell their lands and federal officials to institute the conservation measures and managerial procedures that would prevent further soil erosion. No precedents existed for governmental planning and soil conservation on this grand scale. Even so, by autumn 1934 the AAA had instituted a land-use program that included the purchase of submarginal lands in the Dust Bowl. Three projects, one in

New Mexico and two in Colorado, respectively called the Mills and the Southern Otero and Southeastern Colorado Land Utilization Projects, exemplified the purpose, problems, and results of the New Deal's land-use program in the Dust Bowl.⁵

PROBLEMS OF LAND ACQUISITION

By January 1935, after three years of drought and dust and crop failure in northeastern New Mexico and southeastern Colorado, residents welcomed the federal land-use program. The wind had eroded some croplands to the depth of the plowing, and grazing lands were blowing badly. To hold the soil on those wind-eroded lands, the AAA planned to

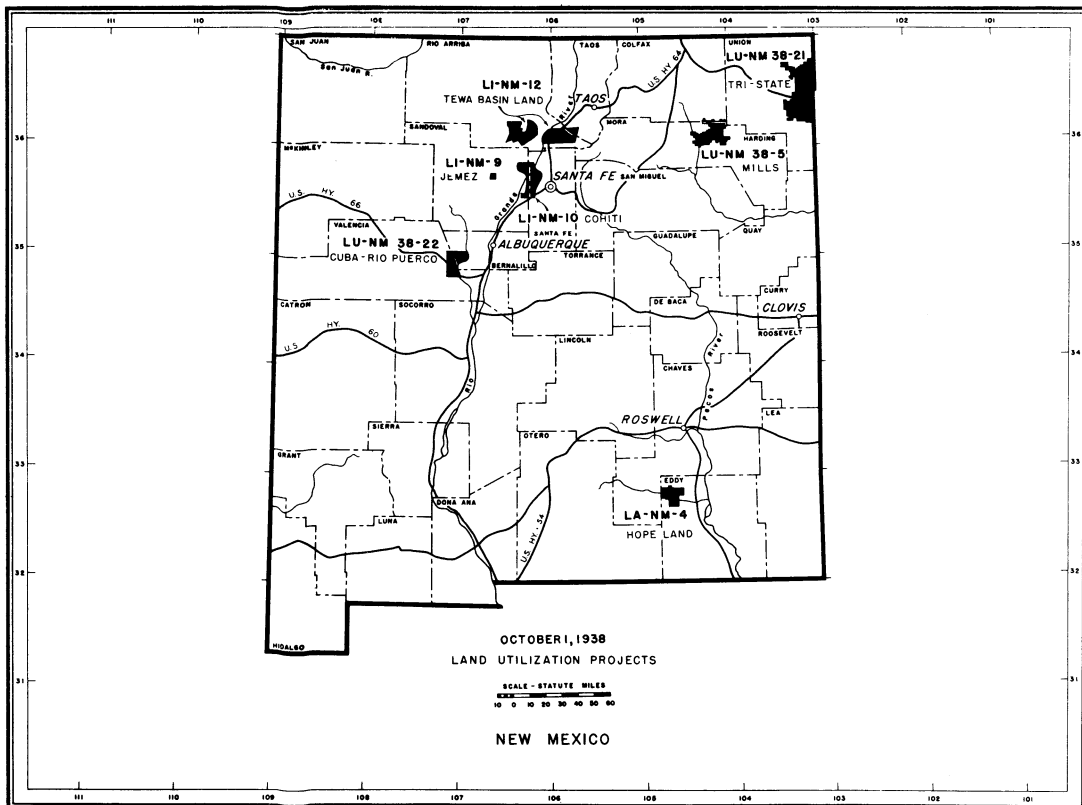


FIG. 2. In autumn 1934, the AAA began purchasing submarginal land in Harding County, New Mexico, for the Mills Land Utilization Project. Two years later, the project expanded to Colfax and Mora Counties. Courtesy Soil Conservation Service.

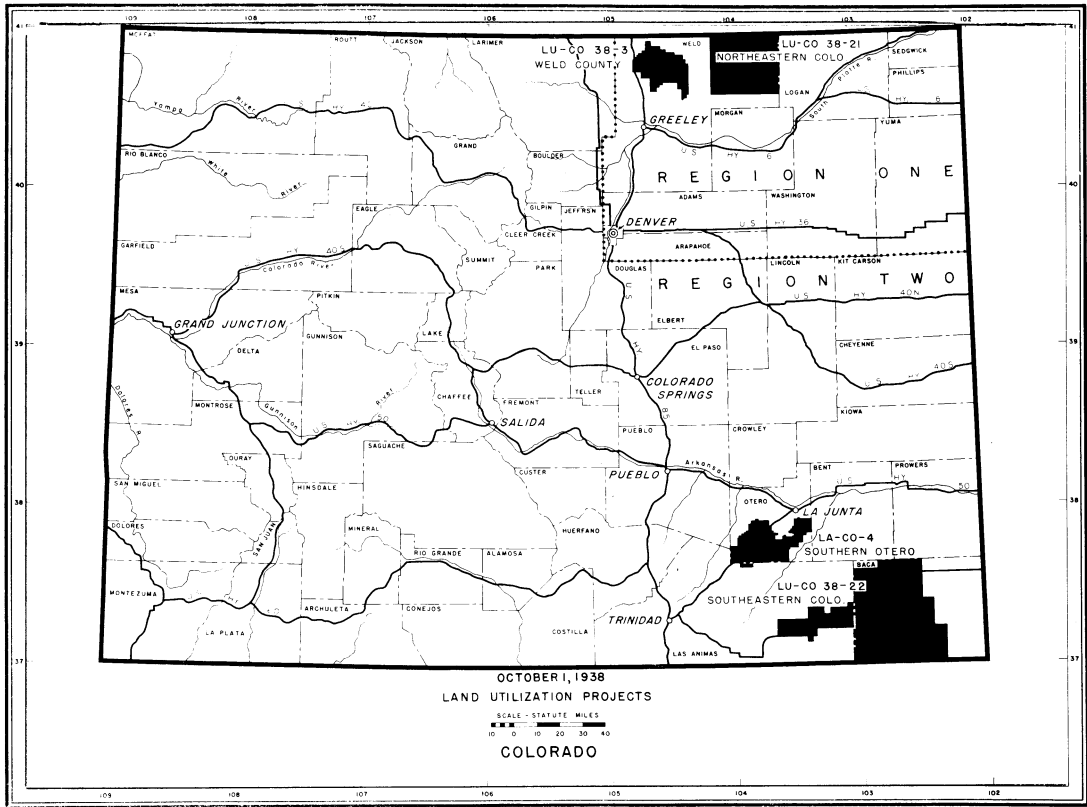


FIG. 3. In late 1934, the AAA made its first land purchase in southern Otero County, Colorado. The Southeastern Land Utilization Project in Baca and Las Animas Counties began in 1937. Courtesy Soil Conservation Service.

purchase 64,440 acres of submarginal land from 148 individuals in Harding County, New Mexico. In southern Otero and Las Animas Counties in Colorado, the federal government planned to purchase 300,000 acres on which 250 families lived and nonresidents owned approximately 45 percent of the land. In both areas, tax delinquencies were high. Harding County landowners or tenants were to be relocated on the Storrie Project near Las Vegas, New Mexico, or on the Middle Rio Grande Conservancy Project in the Rio Grande Valley. The relocation site for Southern Otero and Las Animas County farmers had not yet been determined. Not everyone, however, would be removed from the project areas. Government officials believed the “bet-

ter” farmers, meaning those who were financially stable and owned productive croplands, would stay and lease the restored grasslands for livestock production. Policymakers in the AAA estimated the land in the Mills Project would cost the federal government between \$2.00 and \$4.75 per acre while Southern Otero Project land could be acquired for \$1.50 to \$2.50 per acre.⁶

Soon after the AAA selected the land utilization or reclamation areas in New Mexico and southern Colorado, agents met with landowners and residents to determine their support for the project and to explain land-use policy. Harding County, as well as Otero and Las Animas County, residents quickly showed an almost “unanimous desire” for the land-use

program. Landowners particularly were supportive after learning that they would not be forced to sell their properties but would be given the opportunity to sell at the appraised price, based on the land's value for grazing purposes. The value of improvements would be determined by their condition. Government officials also asked the Federal Land Bank to renegotiate mortgages when the appraised land value was less than the mortgage in order for the owner to receive some equity. Although federal officials hoped all lands within project boundaries would come under federal jurisdiction and planned to acquire or block-in as much as they could of the area within project boundaries in order to develop easily administered grazing districts, they recognized that private holdings would checkerboard the land-use areas.⁷

Most residents and landowners within or nearby the Mills and Southern Otero reclamation projects supported the land purchase concept, but some criticized land-use policy. Dissatisfaction developed because a few landowners hoped to sell their properties for more money than the government offered and because payment was not quickly forthcoming. A southeastern Colorado rancher, for example, had invested \$15.00 per acre on a section of land, but appraisers valued land in his area at only \$2.00 to \$3.00 per acre. Selling at that price, he believed, would turn him into a "pauper" and force him onto the relief rolls, and others in his situation would share the same fate. After enjoying years of adequate precipitation and bountiful harvests, farmers wanted prices commonly paid for land during good times, not the prices of the drought-stricken, dust-laden, depression years. Therefore, in late April 1935 a group of southern Otero County farmers petitioned the AAA to pay not less than \$2.50 per acre for lands within the project area.⁸

Norman G. Fuller, the project manager, was unsympathetic to this plea even though the AAA ultimately paid higher prices. Gray's Land Policy Section, he argued, had selected a portion of southern Otero County for a

reclamation project because that area would not support farming and ranching under private ownership. Thus, to prevent abusive farming and grazing practices and to halt further wind erosion, federal ownership and management were necessary. Although many farmers and ranchers might have a large amount of capital invested in the land, federal policymakers felt no obligation to compensate them for unwise or over investments any more than they assumed the government was obligated to reimburse businessmen for losses that they might incur.⁹

In September 1935, a more serious, though brief, blow up occurred in Roy, New Mexico, over the Mills Project. Scattered rains, delayed payments for optioned lands, and rumors that the land, once restored to grass, would be rented at high prices to nonresident farmers and cattlemen caused a small group of landowners, tenants, and businessmen to petition for the termination of the reclamation project. Landowners who signed the petition charged that the federal government had appraised their properties too low and that the option prices would place them in an even more precarious financial position. They also objected to the "un-American" principle that required the relinquishment of deeds prior to payment for their lands. Moreover, they complained they had been misled about the legal expenses involved. Federal officials had implied that the government would pay the expenses for quieting titles and other legal work, but the government deducted those costs from the agreed price. They also argued that federal officials had indicated the restored grasslands would be rented to residents at rates competitive with taxes paid on privately held or state-leased lands, rather than to "outsiders" for "materially higher" lease fees. In addition, they maintained that those who sold their lands would be "dispossessed of homes" and would thereby create another problem for the federal government.¹⁰

Although these were good reasons for second thoughts about granting purchase options to the federal government, return of

rain was the real reason for the farmers' change of heart. At least the most hopeful of these generally optimistic plainsmen chose to believe that scattered rainfall in the early autumn of 1935 heralded the end of the Dust Bowl. Some who had signed options now believed that they would be better off retaining possession of their lands rather than selling to the federal government and moving elsewhere. Perhaps cynically, but accurately, the editor of the *Roy Record* in Roy, New Mexico, reflected: "Knowing the propensity of the average mesa farmer to condemn the country when it is windy and dry, and then sing its praises at the first drop of rainfall, the *Record* many months ago predicted tough sledding for the land-use program. We said then if favorable conditions returned before the landowners were moved elsewhere, there would be a general clamor for cancellation of the leases. And it has come to pass."¹¹

D. R. W. Wagner-Smith, the Mills Project manager, tried to maintain control of the situation by taking a conciliatory attitude and by explaining federal policy. Wagner-Smith believed the farmers' dissatisfaction stemmed from payment delays for optioned lands and from the government's failure to develop a leasing policy that would favor residents with low rates. The latter problem, he contended, was the "spark which set off the explosion." He assured residents that the federal government would consult with them concerning leasing policy and that the land-use program would be administered on a "fair and equitable basis." Soon after, residents who favored the program called their own mass meeting to garner support for the project. Although those who petitioned for the return of their options did not attend allegedly because they feared "mass violence," the one hundred project supporters who did participate voiced hearty endorsements for the Mills Land Utilization Project and voted to circulate their own petition favoring its completion. With support from the Roy Chamber of Commerce, other community leaders, and the majority of area landowners, work on the project continued. Significantly, opposition to the Southern Otero

and Mills Projects did not stem from a philosophical rejection of New Deal reclamation policy but rather from the landowners' perception that they were inequitably or slowly paid, and these objections were relatively limited.¹²

Most people within the Mills and Southern Otero Projects had good reasons to be supportive. In the Mills area, 85 percent of the inhabitants were on relief. Of the 250 farms recommended for purchase in 1935, the appraised value totaled \$367,372 against mortgages that reached \$250,000 for an average indebtedness of \$1,469 per farm. Many landowners were far behind in their tax payments. By the end of 1934, 28 percent of the 1932 taxes and 34 percent of the 1933 taxes still were delinquent. Most of these farmers had slight chance of regaining self-sufficiency, let alone commercial production. Overall, the people were destitute and lacked the basic necessities of life. Confronting economic problems such as these, the Resettlement Administration (RA), which gained control of the land-use program on 1 May 1935, expanded the purchase plans to 74,500 acres in September to give relief to even more landowners. Moreover, by reseeding 17,500 acres, the RA hoped to make life in that portion of the Dust Bowl less tenuous and disagreeable for those who remained.¹³

Similar tax and mortgage problems existed within the Southern Otero Project, where 90 percent of the inhabitants were on relief and where 14,000 acres needed reseeding immediately. By mid-October 1935, however, the Resettlement Administration had received funds sufficient only for the purchase of 150,000 acres—a substantial reduction from the original 300,000 acre purchase plan. But options for these lands had been obtained with little difficulty, and Fuller believed the federal government could purchase "practically every privately owned acre" within one or two years, if funds were available. Nevertheless, the reduction of the project area by half hindered the development of a conservation program where drought, tillage, and overgrazing had

exposed 70 percent of the land to wind erosion.¹⁴

Other problems developed when some farmers within the Southern Otero Project optioned their lands, then sought loans from local banks to finance resettlement. Those individuals had located specific land on which they wanted to reside, but they needed loans to purchase it in time to plant the next year's crop. Although local banks were cooperative, they were not willing to grant loans until the government checks, which the farmers intended to use as security, arrived. Farmers on the Southern Otero and Mills Projects who had given the government options did not want to plant acreages that the federal government would soon control, yet they could not wait a year or more for payment and resettlement without cultivating their old lands. C. F. Clayton, chief of the Project Planning and Control Section in the Resettlement Administration's Division of Land Utilization could not promise a time of payment. Bureaucratic lethargy and a long appraisal process did not enhance congressional support, and resettlement delays cost the federal government additional planning time and money.¹⁵

Similar problems existed on the Mills Project. In April 1936 eighty-five families were ready to move, but the federal government did not have any place to send them. Those who had optioned lands were embittered and contended that the administration had broken faith with them. In late April the situation improved when the RA authorized Mills Project farmers who had optioned their lands to plant and harvest a crop even though payment might be made before the work was completed. At that time, the federal government had paid for only 8,367 of 66,398 optioned acres for a total expenditure of \$31,376, and to speed the payment process one landowner even had to hire an attorney to plead his case in Washington.¹⁶

Once the land purchase program was underway, the next problem was to formulate a restoration plan for the wind-eroded land. From the beginning, Gray and his associates

intended to remove the New Mexico and Colorado purchase areas from cultivation, restore the grass, and return the land to commercial use under "strict control." No one, however, was quite sure how to achieve those goals. No precedents existed to help federal officials develop a large-scale conservation program, and no one was certain how much time would be required to restore the grasslands. By February 1938, when the land utilization projects were under the jurisdiction of the Farm Security Administration (FSA), no one had developed a conservation program for the Southern Otero Project, and the federal government had done little to halt wind erosion in the land-use area, even though Fuller recommended that cover crops, such as sudan grass or milo, be planted to retard wind movement and to catch drifting soil. He also urged contracting with farmers who had optioned their lands to plant soil-holding crops and contracting with others to seed cover crops on lands of nonresidents. Although the FSA eventually implemented his suggestions, restricted relief funds consistently limited this conservation work.¹⁷

Similar problems plagued the Mills Project. Although the Resettlement Administration planned to remove buildings, reseed grass, construct stock-watering ponds, build roads, and develop recreational areas, little work had been completed by December 1936. Inadequate funding slowed contour listing and the seeding of sorghum cover crops until late June 1937. The lands that were tilled and planted at that time would require relisting and replanting in the spring. L. H. Hauter, regional director of the Resettlement Administration believed. Clearly, restoration of the grasslands would take a long time.¹⁸

Still, federal officials made progress. By July 1937, workers had plowed 18,000 miles of contour furrows on the Southern Otero Project. In addition, the Resettlement Administration supervised the construction of 120 miles of fence and fifteen livestock watering ponds and the removal of forty-two homesteads at a cost of \$140,567. The RA planned to spend an

additional \$43,779 during the coming year for Works Progress Administration (WPA) employees to build another ninety-four miles of fence. Work on the Mills Project also proceeded on a modest scale. By 30 June 1937, employees had contour plowed 10,000 acres and had seeded more than 7,000 acres, probably with a sorghum nurse crop. Officials proclaimed that 40,000 acres were "revegetated," which probably meant the weeds had been allowed to hold the soil against the wind. Developmental work also involved the construction of three hundred miles of fencing. By that time, the federal government had acquired 67,647 acres at a cost of \$274,034, or \$4.05 per acre. It also had spent \$118,847, or \$1.76 per acre, for conservation work. The RA considered this expenditure reasonable for returning the land to grass. Still, limited funds and drought prevented a quick return of the grass to halt wind erosion. With only \$30,000 allocated for conservation work during fiscal 1938, the RA planned to move fences and reorganize grazing areas. Project officials also planned to contour plow blowing fields and to hold the soil with forage crops, if sufficient moisture was present to sustain growth. They also intended to keep cattle off severely blowing lands so the vegetation would be "unmolested" if it grew.¹⁹

Similar conservation work began on the Southeastern Land Utilization Project in Colorado, which included lands in Las Animas and Baca Counties, after project approval on 3 November 1937. Although the original plan called for the purchase of 377,000 acres, no one could say how much land eventually might be acquired. This reclamation project included some of the most severely wind-eroded lands in the Dust Bowl. In Baca County alone nonresidents controlled 894,956 acres, or 55.2 percent of the land, and a high percentage of resident landowners and tenants were on relief. By mid-March 1938, conservation work on project lands in Baca County had priority over the five other land utilization projects in the Dust Bowl. With the FSA pressuring the project manager to "show some

results," an "emergency treatment" program, which involved contour listing, chiseling, leveling, and reseeding, was planned for the spring "blow months." Contour furrowing would help prevent further loss of vegetation on wind-damaged and overgrazed pasture lands. If normal precipitation returned, federal officials hoped to lease the better lands after two or three years. Nevertheless, as late as June 1938, the FSA used most of its financial resources for land acquisition, rather than for the development of a conservation program. At that time, for example, officials budgeted \$502,740 for land purchases but provided only \$87,310 for conservation. Even so, workers planted cover crops on 40,000 acres in 1939, and officials optimistically hoped to complete the soil stabilization program the next year.²⁰

Funding for conservation and land acquisition, however, always was less than requested or needed because Congress restricted much of the funding to aiding the unemployed. Consequently, during June 1938 the FSA authorized conservation work only for the most severely eroded lands in contiguous blocks of 2,000 acres or more. If landowners within or near the projects treated their lands to prevent blowing, however, project managers were permitted to conduct soil conservation work on adjacent federal lands to help prevent further wind erosion or damage to those private lands and thereby to enhance the economic position of resident operators. Even so, after the Soil Conservation Service (SCS) became responsible for the land utilization projects on 16 October 1938, more than two years passed before the agency gave major attention to reseeding native grasses to obtain permanent stabilization of project lands in New Mexico and Colorado.²¹

GRAZING DISTRICTS

While policymakers grappled with the problems of land purchase and reclamation, they also developed plans to return the restored grasslands to private use. The New Dealers believed that federally controlled graz-

ing would ensure the best use of the grasslands and enable cattle producers to develop economically viable operations. Moreover, in times of prolonged drought, federal management would enable quick adjustment to reduce the number of cattle or sheep that grazed on project grasslands and thereby prevent overgrazing, denuded lands, and the return of the dust storms.

Indeed, by 1935 federal management seemed necessary on the Southern Otero Project, where 15,500 sheep grazed on pastures sufficient for only 4,000 head. Although the 3,700 cattle present were below the 4,500-head limit for the project, policymakers were determined that the carrying capacity would not jeopardize the grass during times of drought. Moreover, pasture rotation needed to be strictly enforced to prevent overgrazing and exposure of the soil to the wind. Federal officials planned to reduce the livestock to an appropriate number by the 1938 grazing season. In time, New Dealers hoped that resident livestockmen would form grazing associations that would rent the grasslands and work with the project manager to develop plans for the best range management and to determine equitable leasing rates. The federal government would issue permits that specified the number of livestock and the grazing period for the leased lands. In the case of leases to individuals, the applicant was to be a "viable land owner" or resident engaged in farming or ranching who owned the livestock. Monthly grazing fees per head of \$.17 for cattle, \$.22 for horses, and \$.04 for sheep were payable semiannually on 1 May and 1 November. Livestockmen were not to place salt near water holes, nor were they to bed sheep in the same place for more than three continuous nights from April to October, to prevent overgrazing. No one could erect a permanent corral, and livestockmen were responsible for the maintenance of fences and ponds within their lease areas.²²

Federal officials developed similar guidelines for the Mills Project. By the spring of 1937, Gray, now director of the Division of

Land Utilization within the Resettlement Administration, had designated the Mills Project a "Grazing Reserve." "Grazing districts" within the reserve were available for lease to any individual or association engaged in ranching or farming in or near the area. Local livestock producers, who in general were not interested in forming grazing associations, would receive preference for grazing permits. Ranchers who depended solely upon livestock for their livelihood were to be granted grazing permits for 125 animal units on project lands while those who operated diversified farms could acquire permits for eighty animal units until the carrying capacity of the grasslands had been reached. If drought forced a reduction in the number of animals grazing on project lands, the RA could require livestockmen to reduce their herds over a three-year period with a one-third reduction occurring each year. Livestock producers could appeal all reductions to the regional director of the land utilization projects in Amarillo, Texas, who transmitted those he approved to the secretary of agriculture. The \$2 per animal grazing fee equalled the prevailing rate for privately leased land in the Mills area. Although federal officials recognized the advantages of long-term permits for agricultural planning, they did not intend to issue such permits until a comprehensive conservation program had been formulated. They expected the Mills and Southeastern Projects to be self-liquidating within ten to fifteen years.²³

FUNDING PROBLEMS

By spring 1939, reclamation still proceeded slowly in southeastern Colorado. Funds were nearly exhausted for conservation work on the Southeastern Land Utilization Project. The SCS plans for June and July involved merely seeding cover crops to stabilize blowing soil. The agency had hired thirty farmers with tractors to do the planting, but with only \$8,000 available, each tractor could run only ten days, halting planting about mid-June. The SCS needed at least \$26,000 to continue

planting until July 25—the date beyond which germination was limited. By the end of July, only 4,000 acres had been contour furrowed in southern Otero County at an expenditure of \$13,640. Cost prohibited similar work on another 100,000 acres. Optioned land was often saved because the federal government encouraged farmers to put it into the Agricultural Conservation Program, which provided reclamation funds under the Soil Conservation and Domestic Allotment Act of 1936, but the federal government usually had to stabilize the worst lands because local farmers would not undertake that task.²⁴

Funding problems continued to plague the development of the land utilization projects in Colorado. The Soil Conservation Service preferred to hire local farmers because they had the needed equipment and because this policy built community goodwill, enabled farmers to earn extra money, and permitted the agency to avoid the procurement and maintenance of equipment. WPA funds, however, could not be spent to hire farmers with tractors; they could be used only to hire the unemployed. On the Southern Otero Project, Fuller could not see any justification for spending \$30,000 to purchase the tractors and grain drills needed so that fifty or seventy-five men could be employed for two months planting grass seed. Moreover, Public Works Administration (PWA) funds only could be spent for heavy construction and equipment, not for conservation work such as listing, contour plowing, and planting. Furthermore, the Civilian Conservation Corps did not have sufficient equipment for reseeding project lands, and WPA and PWA monies could not be used to buy equipment for the CCC.²⁵

Similar problems existed on the Mills Project. By February 1939, funding shortages convinced project officials to purchase only the minimal acreage necessary to bring wind erosion under control and to ensure the proper use of the land. Although the SCS did not indicate the acreage reduction that could be made, agency officials believed a cutback would permit financially sound local operators

to acquire a portion of the optioned lands and thereby increase the size and economic viability of their agricultural operations. In fiscal 1939, only \$5,959 in WPA funds and \$708.30 in PWA funds were available for conservation work, and project administrators could see no alternative to reducing the size of the Mills Project. During fiscal 1940, they had only \$4,819 in WPA funds available for conservation work, but with restrictions on its use identical to those placed on the projects in southeastern Colorado, no reseeding, fence construction, contour plowing, or farm pond construction could be completed. The onset of a new war did not improve funding, and the SCS terminated land purchases after February 1943 except for small acquisitions to block-in an area.²⁶

RESETTLEMENT

The resettlement of families from project lands was the most controversial but least serious problem attendant on the projects. Inadequate funding, payment delays, procedural changes, unclear objectives, and insufficient areas for relocation made an early shambles of this aspect of the land-use program. Between January 1938 and July 1941, the federal government purchased 581,696 acres in the southern Great Plains, much of which was in the Dust Bowl. Only 29.3 percent of that acreage was grazed or cultivated at the time of purchase; the remaining acreage was abandoned. Resident owners occupied only 6.7 percent of that area while tenants held 10 percent of the land, thus leaving 83.1 percent of the land unoccupied. Although the resettlement program was controversial nationwide, the federal government did not force a large number of owners and tenants off Dust Bowl lands. Apparently, most farmers within the project areas moved with their own funds and relocated in places of their own choosing rather than accept federal land elsewhere.²⁷

ASSESSMENT

Not everyone across the nation or in the

Dust Bowl supported the reclamation program. Some journalists, businessmen, and farmers, for example, argued that the land utilization projects would ruin the local economy and destroy the tax base. The critics, however, were a minority. Most Dust Bowl residents, like those near or within other land-use projects, supported the goals of the federal government and the work of Gray and his associates. Certainly, the Department of Agriculture and other agencies, such as the Resettlement Administration, Farm Security Administration, Works Progress Administration, Civilian Conservation Corps, and the Federal Emergency Relief Administration, helped farmers improve their soil conservation practices in the Dust Bowl and remain on the land until the rains returned. The Soil Conservation Service particularly was instrumental in helping stabilize the land as well as in teaching farmers and ranchers the best techniques to conserve the soil.²⁸

Because of those efforts, and with the return of near normal precipitation during the late 1930s and early 1940s, the grass grew once again, the dust settled, and the work of the SCS was much easier than in the past. Certainly, the land-use projects in New Mexico and Colorado were not capable of solving all of the economic and social problems in those portions of the Dust Bowl. As part of the Roosevelt administration's national soil conservation program, however, the land utilization projects in New Mexico and Colorado helped to end the dust storms, restore wind-eroded land, and return the region to a sound agricultural base. Moreover, these land utilization projects and the newly organized conservation districts encouraged improved conservation practices on private lands once normal precipitation returned to the Dust Bowl.²⁹

In retrospect, the purchase of submarginal land, the restoration of the grass, and the wise management of the grasslands enabled the federal government to ensure better use of the land than ever before. These efforts, of course, took time. Just as the land could not be

purchased nor the grass restored immediately, many years were needed for this land-use policy to show successful results. Indeed, the Soil Conservation Service maintained control of the projects until November 1953, when administrative authority passed to the Forest Service. In 1960 the USDA recognized the importance of these reclamation projects to the national soil conservation program when it created the Kiowa National Grassland from the Mills Land Utilization Project and the Comanche National Grassland from the Southern Otero and Southeastern Colorado Projects. Today, the Kiowa and Comanche National Grasslands serve not only as grazing lands but also provide wildlife habitat, mineral reserves, and recreation areas. Above all, the Kiowa and Comanche National Grasslands remain monuments to a grand experiment in state planning and land reclamation in the Dust Bowl.³⁰

NOTES

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1. R. Douglas Hurt, *The Dust Bowl: An Agricultural and Social History* (Chicago: Nelson-Hall, 1981), pp. 23-25, 30, 33, 67-137.

2. Richard Lowitt, *The New Deal in the West* (Bloomington: Indiana University Press, 1984), pp. 61-62; *Yearbook of Agriculture* (Washington, D.C.: GPO, 1923), pp. 415-506.

3. Richard S. Kirkendall, *Social Scientists and Farm Politics in the Age of Roosevelt* (Columbia: University of Missouri Press, 1966), p. 39; Mary W. M. Hargreaves, "Land Use Planning in Response to Drought: The Great Plains Experience of the Thirties," *Agricultural History* 50 (October 1976): 566.

4. Kirkendall, *Social Scientists and Farm Politics*, pp. 76-78, 81-82.

5. R. Douglas Hurt, "The National Grasslands: Origin and Development in the Dust Bowl," *Agricultural History* 59 (April 1985): 246-59.

6. New Mexico Submarginal Land Purchase Project Proposal A-4, 10 January 1935, LU-NM-5, box 266, National Archives Record Group 114 (hereafter all manuscripts cited are from the Soil Conservation Service, Land Acquisition Files,

National Archives Record Group 114); Southern Otero County Land Project, Preliminary Proposal A-3, 18 January 1935, LU-CO-4; Southern Otero County Land Use Adjustment Project, 20 February 1935, LU-CO-4, box 53; Final Plan, Southern Otero County Land Readjustment Project, 23 July 1935, LU-CO-4, box 54; L. H. Hauter to L. C. Gray, 9 April 1935, LU-MN-5, box 268; Mills Land Use Adjustment Project, New Mexico Proposal A-4, Final Plan, 15 May 1935, LU-NM-5, box 267. By late 1936, appraisal values on the Mills Project averaged \$4.10 per acre. See Semi-Monthly Project Progress Report, Mills Land Use Adjustment Project, 30 November 1936, LU-NM-5, box 266. In early 1937, appraisal value averaged \$2.34 per acre on the Southern Otero County Project. See Semi-Monthly Project Progress Report, Southern Otero County Land Readjustment Project, 4 January 1937, LU-CO-4, box 53. In 1936, the Mills Project was expanded to portions of Mora and Colfax counties. See Preliminary Plan for Land Acquisition, The Mills Land Use Adjustment Project, 23 April 1936, LU-NM-5, box 267. The Southern Otero Project included land in Las Animas County, Colorado. See Agricultural Demonstration Project Proposal A, CO-4, Lands Recommended for Purchase, 6 December 1935, LU-CO-4, box 53.

7. New Mexico Submarginal Land Purchase Project Proposal A-4, 10 January 1935, LU-NM-5, box 266; Mills Land Use Adjustment Project, New Mexico Proposal A-4, Final Plan, 15 May 1935, LU-NM-5, box 267; Southern Otero County Land Use Adjustment Project, 20 February 1935, LU-CO-4, box 53.

8. U. S. Kellogg to Senator Edward P. Costigan, 4 April 1935, LU-CO-4, box 53; Petition from Otero County to the AAA, 23 April 1935, LU-CO-4, box 56.

9. Norman G. Fuller to C. F. Clayton, 26 April 1935, LU-CO-4, box 56.

10. Petition to the Honorable John R. Dempsey, n.d., ca. late September or early October 1935, LU-NM-5, box 266; *Roy Record*, Roy, New Mexico, 4 October 1935.

11. *Albuquerque Journal*, 8 October 1935; *Roy Record*, 4 October 1935.

12. D. R. W. Wagner-Smith to L. H. Hauter, 5 October 1935, LU-NM-5, box 266; *Roy Record*, 4 October 1935.

13. Conditions Justifying the Acquisition of Land and the Execution of the Development Plan Proposed for the Mills Land Use Adjustment Project, 1 February 1936, LU-NM-5, box 269; New Mexico Submarginal Land Purchase Project Proposal A-4, 10 January 1935, LU-NM-5, box 266; Mills Land Use Adjustment Project, Proposal A-4, Final Plan, 15 May 1935, LU-NM-5, box 267; Mills Land Use Adjustment Project, Conditions Justifying the

Acquisition of Land and the Execution of the Development Proposed, 15 September 1935, LU-NM-5, box 269.

14. Southern Otero County Land, Preliminary Proposal A-3, 18 January 1935, LU-CO-4, box 53; Norman G. Fuller to C. F. Clayton, 1 November 1935, LU-CO-4, box 53; Development Plan for Southern Otero County Land Readjustment, Colorado, LU-CO-4, box 55; Milard Peck to C. F. Clayton, 24 June 1936, LU-CO-4, box 53. By July 7, 1936, the Roosevelt administration had allotted \$433,413 for land purchases on the Southern Otero Project. See A. W. K. to L. C. Gray, n.d., LU-CO-4, box 53.

15. Norman G. Fuller to C. F. Clayton, 23 November 1935, LU-CO-4, box 53; Clayton to Fuller, 25 November 1935, LU-CO-4, box 53.

16. Preliminary Plan for Land Acquisition, The Mills Land Use Adjustment Project, 23 April 1936, LU-NM-5, box 267; *Roy Record*, 24 April 1936; writer unknown to Honorable John J. Dempsey, 29 April 1936, LU-NM-5, box 266. Title clearance procedures caused project delays. Before payment was made, the title had to be clear beyond any chance of contradiction.

17. Final Plan, Southern Otero County Land Readjustment Project, 23 July 1935, LU-CO-4, box 54; C. W. William Lawrence to W. M. Russell, 29 December 1936, LU-CO-4, box 55; Hurt, *The Dust Bowl*, p. 80; Norman G. Fuller to James C. Foster, 7 February 1938; Amarillo Regional Office Records of the Project Plans Division, 1936-1941, box 16.

18. Semi-Monthly Project Progress Report, Mills Land Use Adjustment Project; Memorandum from Aurelia Plavk, subject telephone call for M. McMann, Senator Hatch's Office, 31 December 1936, LU-NM-5, box 269; L. H. Hauter to W. W. Alexander, 30 June 1937, LU-NM-5, box 268.

19. Memorandum for Dr. A. G. Black, 29 October 1937, LU-CO-4, box 51; Memorandum for Dr. Black, 2 November 1937, LU-NM-5, box 269. No itemization for reseeding was given.

20. H. H. Bennett, memorandum for the secretary, ca. 27 February 1939; LU-CO-4, box 59; Land Ownership, Baca County, Colorado, LU-CO-22, box 3; Land Acquisition Plan for Southeastern Colorado Land Utilization and Conservation Project, Part V, 8 November 1938, LU-CO-22, box 59; Olaf F. Larson, "Rural Households and Dependency," Colorado Agricultural Experiment Station, *Bulletin No. 444*, May 1938, p. 13; Glen Briggs to Norman A. Fuller, 2 April 1938, Amarillo Regional Office Records of the Project Plans Division, 1936-1941, box 16; Supplement, Southeastern Colorado Land Utilization and Land Conservation Project (Baca County, Colorado), 17 March 1938, LU-CO-22, box 59; Unknown newspaper clipping, 11 March 1940, Amarillo Regional Office Records of

the Project Plans Division, 1936–1941, box 16. The six land utilization projects in the Dust Bowl included Mills in New Mexico; Southern Otero and Southeastern Colorado in Colorado; Morton County in Kansas; Cimmaron County in Oklahoma; and Dallam County in Texas.

21. Writer unknown to John A. Martin, 25 August 1935, LU-CO-4, box 53; R. M. H. to Martin, 31 January 1936, LU-CO-4, box 53; Policies Governing Authorization for Land Treatment, Amarillo Regional Office of the Project Plans Division, 1936–1941, box 16.

22. Southern Otero Project Range Management Plan, 12 August 1937, LU-CO-4, box 56; Final Plan, Southern Otero County Land Readjustment Project. Livestockmen in the Southern Otero Project were interested in organizing a grazing association, provided the federal government did not establish a "complete dictatorship" regarding the formulation of leasing policy. Lease fees were to provide a reasonable return plus the equivalent in taxes, a percentage of which was to go to the county for loss of tax revenue.

23. N. H. Buck to C. F. Clayton, 10 August 1938, LU-NM-5, box 269; Proposed Regulations for the Administration of the Grazing Lands under Control of the Mills Project, ca. April 1937, LU-NM-5, box 266; W. F. Dickson to J. C. Foster, 24 August 1938, LU-NM-5, box 269; Mills Land Use Adjustment Project Conditions Justifying the Acquisition of Land and the Execution of the Development Proposed, 15 September 1935, LU-NM-5, box 269; Supplement, Southeastern Colorado Land Utilization and Land Conservation Project (Baca County, Colorado), 17 March 1938, LU-CO-22, box 59. One cow, bull, or steer equaled one animal unit; two horses equaled three animal units; and five sheep equaled one animal unit. Livestock under six months of age were not counted.

24. Norman G. Fuller to Alan F. Furman, 25 May 1939, Amarillo Regional Office Records for the Project Plans Division, 1936–1941, box 16; R. H. Davis to H. H. Bennett, 28 July 1938, Amarillo Regional Office Records of the Project Plans Division, 1936–1941, LU-CO-4, box 16.

25. Fuller to Furman, 12 June 1939, Amarillo Regional Office Records of the Project Plans Division,

1936–1941, box 16.

26. C. F. Clayton to Alan F. Furman, 4 February 1939, LU-NM-5, box 5; Current Work Program, Periods 1 July 1939–30 June 1940, Mills Land Use Adjustment Project, June 1939, LU-NM-5, box 5; Current Work Program, Periods 1 July 1940–30 June 1941, LU-NM-5, box 5, H. H. Wooten, *The Land Utilization Program 1934 to 1964*, U.S. Department of Agriculture, Economic Research Service, no. 85, n.d., p. 14.

27. Tevis E. Wilkins and George B. McIntire, "An Analysis of the Land Acquisition Program," Soil Conservation Service, *Miscellaneous Publication No. 28*, August 1942, pp. 20, 23, 34. For a brief overview of relocation problems for the Mills Project see Paul Bonnifield, *The Dust Bowl* (Albuquerque: University of New Mexico Press, 1979), pp. 150–51.

28. Kirkendall, *Social Scientists and Farm Politics*, p. 85; Hurt, *The Dust Bowl*, pp. 117–18; Lowitt, *The New Deal in the West*, pp. 59–60.

29. Hurt, "The National Grasslands," p. 258.

30. *Federal Register*, 24 June 1960; New Mexico Submarginal Project Proposal A-4, 1 January 1935, LU-NM-5, box 266; H. H. Bennett to W. P. Lambertson, 5 August 1939, Amarillo Regional Office Records of the Project Plans Division, 1936–1941, box 16; Memorandum of the Secretary of Agriculture, No. 1320, 2 November 1953, History Office, Soil Conservation Service, Washington, D.C. Today the total amount of land acquired and the cost of the Mills Project in New Mexico and the Southern Otero and Southeastern Colorado Projects are difficult to determine. The records for land acquisitions and conservation expenditures were poorly kept, if at all. Speed was the overriding concern as officials hurried to obtain land in order to bring the blowing soil under control. As of September 1982, the area of the Kiowa National Grassland encompassed 136,412 acres while the Comanche National Grassland contained 418,887 acres. Some of that acreage, however, had been acquired since the termination of the land-use program in 1943. See "Land Areas in the National Forest System as of September 30, 1982," USDA FS-383, pp. 41, 51–52.