WE HAVE wasted our land recklessly in the past. In floods and dust storms, in higher taxes and human suffering, we are all paying the price today.

The individual men who committed this waste did so ignorantly, not willfully. They followed the example of others, an example on which society as a whole had set its approval. Our riches were without limit, they thought. Let each man take what lies within his reach.

Harsh experience has dispelled this pleasant indifference. We have learned that our land, as well as our forests and minerals, must be conserved. We have learned that this is a group, not an individual, problem.

The Administration recognizes that the conservation of land is a primary duty of the Federal and State Governments. It recognizes that the people who depend upon the land are entitled to better social and economic benefits therefrom. The purpose of this booklet is to describe what one governmental agency, the Resettlement Administration, is doing to preserve the riches of America's land for the America that is to come.

R. G. TUGWELL, Administrator.

WASHINGTON, D. C., 1936
1 * THE SETTING

AMERICA'S LAND

When the first colonists landed at Jamestown in 1607, they fell heir to one of the richest lands in the world. Its fertile soil gave them the opportunity to achieve individual economic independence and on this basis to found a new system of political liberty. A great forest extended from the Atlantic to the Mississippi. Beyond the great river lay the prairie where centuries of growing grass had built up rich black earth. Then came the drier area which we know as the Great Plains, and finally the Rocky Mountain region with its forests and vast stores of mineral wealth.

Soil, grass, timber, and minerals—these have been the elements of America's land, upon which has been built the great economic structure of the modern United States.

OUR LAND TODAY

During three centuries, several hundred million people have wrested a living from 2 billion acres that comprise America's land.

To make way for the spread of farms and cities from the eastern seaboard to the west, almost half of the original forest area has been cleared. Corn, cotton, tobacco, and grains flourish where the timber once stood, and cattle graze on the old buffalo ranges. One of the richest farming regions in the world has grown up in the fertile valley of the Mississippi. Even the dry lands of the Great Plains have been put to use for wheat farming and cattle ranching, and irrigation has made the deserts blossom.

Today about half of the total area of the United States, some 987,000,000 acres, is in farms. Of this farmland, about 413,000,000 acres are in crops. The rest is taken up by pastures, woodland, and waste.
Then, there are 615,000,000 acres of land which are classed as forests or burned-over and cut-over areas.

A third great subdivision is pasture, comprising chiefly the great stretches of dry range in the West. Some 329,000,000 acres are included in this class.

Cities, roads, playgrounds, small parks, and the like occupy 53,000,000 acres, and 77,000,000 acres are considered worthless, being largely deserts, mountains, and swamps.

These figures do not tell anything about the differences in the quality of the land. They do not distinguish, for example, between exhausted soil of the Piedmont district and the rich earth of Iowa. Obviously, these differences are of the greatest importance to an understanding of our present problems of land use and agriculture.

A recent national survey showed that there were about 650,000 farms, covering 100,000,000 acres, on which it is impossible to raise crops at a profit. This land, for various reasons, has proved too poor or insufficiently supplied by nature with water.

Located on these farms are many of the 1,000,000 farm families who have been on the relief rolls. Many of these families have never been completely self-supporting. None of them can ever hope to be, so long as they depend on the cultivation of unproductive farms. Their tragic status supports the contention that there have been mistakes in our use of the land in the past.

Other types of land offer similar contrasts. The 615,000,000 acres of forest land in the United States vary from small areas of virgin timber to the vast areas which have been devastated by forest fires and wasteful methods of lumbering. Productive forests, particularly those under such control as insures their conservative use, can support a large lumber and wood-using industry. But burned-over areas, blackened and charred by negligence and ruthless exploitation, have practically no economic value and can be made productive again only at a heavy expense.
Grass, like trees, also must be protected against misuse. The cattle industry of the West depends on the grasslands for pasturage. Where the grassland has been protected, it has remained rich and productive. But hundreds of thousands of acres have been overgrazed and today produce little but Russian thistle and sage. Like unproductive farmland and cut-over forests, these ruined grasslands are a heavy burden on the Nation.

THREE CENTURIES OF SETTLEMENT

American history is built around the story of how the country was settled and its resources exploited to human advantage. The good and evil of land use today can be traced to the way our 2 billion acres were used, and abused, in the past.

Centuries of working their limited farm land had taught the peasants of Europe to conserve soil and forests. The first colonists brought this knowledge with them to the New World. But, faced with an abundance of land such as they had never known, they soon lost their interest in the wise principles of agriculture and forestry.

When land which produced bountiful yields of tobacco became exhausted through lack of proper care, the owners moved to fresh fields, leaving the old to be reclaimed by the wilderness. By the end of the seventeenth century the pressure of exhausted land was already felt in Virginia and Maryland. In another century the need for new land became desperate. The great plantation owners joined the small independent farmers in demanding that the West be opened to settlement. The English refusal to comply with this demand was one of the causes of the Revolutionary War.

After the Revolution the land west of the Alleghenies was opened and the second great period of settlement was begun. Frontiersmen wound their way through mountain gaps, settled in the heavily timbered lands beyond, and began to clear the forests.
They were followed by thousands of farmers and their families who took up land in the fertile Ohio Valley. As the movement to the west continued, laws were enacted to make it easy for an individual farmer to acquire a home on the public lands. Eventually, the demands of the land-hungry pioneers were met by the Homestead Act of 1862. This law permitted any head of a family to settle, free of charge, on 160 acres of public land. On the basis of these liberal provisions the area west of the Missouri River was settled. This was the third great period of settlement, which ended in the early twentieth century.

A last great movement onto public land took place within recent years. Under the pressure of inflated war-time prices for grain, new machines were invented that permitted successful large-scale cultivation of wheat on lands too dry for other types of farming. During the years following the war, the tide of settlement flowed with increasing volume into the arid plains, even though wheat prices began to tumble rapidly. Like the whole story of which it was a chapter, the settlement of dry lands during the 1920's had both good and bad results. Good land, where there was sufficient rainfall, produced prosperous farms. On land where the soil was poor or rainfall insufficient, the new farmers failed; their hopes were shattered lastly by the great drought of 1934-35.

Our century-long struggle with the wilderness has determined the American attitude toward natural resources. To our forefathers the idea that some day there might not be enough land for everyone seemed absurd. They felt that “there will be land for the hundredth and the thousandth generation.” To the homesteaders the forest was a bitter enemy. It had to be destroyed before they could work the farms which would make them independent and comfortable. They believed the land and forests to be endless.

We are at last aware not only of the economic losses brought about by the destruction of our land but also of the heavy
human costs—the poverty and despair—entailed by the settlement of poor land, by the exhaustion of soil, and by the depletion of forests. Today, the entire nation is burdened with the economic and social consequences of the careless conquerors of the country’s land.

2 * THE PROBLEM

THE MISUSE OF AMERICA’S LAND

In the spring of 1934 great dust storms swept over the West. Where a few weeks before the first green shoots of July wheat had covered the plains, there remained only acres of desert. People died of dust-pneumonia, suffocation, and lung hemorrhages induced by the dust-laden air. A grim message of this disaster was brought to the East when in May, soil, carried by the wind 1,500 miles, blotted out the sun in cities along the Atlantic coast.

These dust storms had been a serious problem in the West before 1934. Beginning in 1931, they had become increasingly severe in the following years. In 1933 and 1934 they destroyed 4 million acres of western land and seriously damaged 60 million more. The great drought of 1934 only intensified their devastating effects, serving to bring them to the attention of the whole country.

That the dust storms were national catastrophes, that all suffered to some extent from the distress and waste they caused, is readily admitted. It may be comforting to think of them as unavoidable “acts of nature.” But the sober truth is that their evil effects could have been largely prevented if the people had taken the right steps in time.

The areas devastated by the dust storms were originally grassland where great herds of buffalo grazed. Then the first settlers came and the buffalo gave way to cattle on the open range. Later, when the era of the cowboy had passed, the land was taken up by homesteaders who converted it to crop farming. The grass, whose roots had held the topsoil in place, was plowed under. This was a vital mistake, for when drought took the moisture out of the soil, there was nothing to hold the soil down and the wind blew it away in clouds of dust.

This land, fit only for grazing, never should have been farmed.

WASTED DOLLARS

Misused land, dramatically illustrated by the wide-sweeping dust clouds, is costly. It affects the pocketbook of every American. It places a needless burden upon whole communities.

Unproductive land, or as it is sometimes called, submarginal land, is economically expensive. Farmers living on such land find it impossible to support themselves. Obviously, they can pay no taxes. Nevertheless, the local authorities must provide roads, schools, and, in most cases, some form of poor-relief. Such essential services have brought some county governments in the cut-over forest sections of the Lake States to the point of bankruptcy.

In certain counties of one of these States a study of this problem was made. In one county it was found that 28 families stranded on isolated, unproductive farms cost the local government an average of $185 a year each merely for the transportation of their children to and from school. The cost of school maintenance is not included in this sum. The same families paid an average annual tax of $10.80 a year. This means that the other taxpayers of the county had to subsidize the residence of these people at a rate of more than $5,000 a year.

In another case the county had to spend $90.80 for each of several families merely to keep open the roads leading to their isolated dwellings. This cost amounted to 13 times the total tax paid by these families.
A striking example of excessive costs due to settlement on poor land may be found in three counties of a State in the Great Plains region. Continued drought has made the land useless for farming in large parts of these counties. At first the poverty-stricken families were cared for by the county. When the burden became too heavy, outside agencies extended their help. The Red Cross brought food and clothing and medical aid. Emergency feed and crop loans were made to the farmers by the Federal Government. The Reconstruction Finance Corporation tried to help the large farm organizations while the Federal Emergency Relief prevented starvation when other means failed.

It is estimated that since 1930, approximately $7,000,000 has been spent in this manner in these three counties. The money has not been spent in any constructive way. It has merely kept the people alive in their hopeless struggle against overwhelming natural forces. Lack of rainfall makes the land unfit for crop farming. Grazing is the sole use to which the physical qualities of the land suit it. The only permanent solution is to turn this district into a cattle range.

**HUMAN COSTS**

Higher taxes are the immediate dollars-and-cents cost of the misuse of land. There are other costs in suffering and social decay that are far more serious and abiding.

To put it one way: In 1930 almost 1,000,000 farm families—15 percent of the total number—received an income per family of less than $400. This does not mean $400 in cash. It includes the value of all products of the farm, whether sold or consumed at home.

These are cold figures. They do not give one a real understanding of the condition of these 5 millions of our people. The shacks they live in rival the worst slums of the big cities. Grinding poverty takes its heavy toll in disease and ignorance.
This does not square with the American idea of the free and independent farmer.

These conditions are not the product of a single cause. Certainly it is unfair to put the blame solely on the individuals themselves. "Go west, young man" has for generations been the national formula for achieving economic independence. There was no way the people who followed this advice could discover what land was unfit for farming. We see today the results of their unavoidable mistakes. Nor can the farmers who exhausted good land by wasteful methods of cultivation be entirely condemned. Only comparatively recently has reliable information about agriculture been made available to everyone.

However, land abuse may have occurred, the farming of poor land is one of the chief causes of rural poverty today. The million poor farm families live for the most part in what are called "problem" areas. In these areas, the forests have been cut over, or erosion has washed away the fertile topsoil, or the land has been exhausted, or rainfall is insufficient. Successful farming is a physical impossibility. When attempted, the costs, human and financial, are heavy. The whole nation has an interest in seeing that this be changed.

"TESTIMONIALS TO FOLLY"

Poverty, distress, unnecessary taxes, these we all understand and want to eliminate. Yet, if our efforts to do so are to be successful, we must end misuse of the land. Poor land must be used in a way that is profitable for the present and the future. That is, in the fullest sense, it must be conserved.

Why cannot this land be farmed? If it cannot be farmed, what can it be used for? These are the questions the land conservationist must answer.

In some cases, of course, the land never has been, and never can be, farmed successfully. In most of the cut-over forest areas, for example, no treatment of the land can make crop farming profitable. In other cases, the soil was originally fertile but has been exhausted or has eroded away. Land of these
two types can often be used for forestry. In this way it can be
made to yield a profit. At the same time it can be made to serve
in aid of flood control and to provide a refuge for wild game as
well as a place for camping and recreation.

In general, however, the question of whether any particular
land is capable of supporting farm families of normal ability
is dependent upon three factors—soil, topography, and climate.

Improper farming practices account to some extent for deple-
tion of the soil; but erosion, which in a number of cases has been
induced by improper farming practices, is regarded as its arch
enemy. Of course a certain amount of erosion is inevitable.
The rapidity with which our land has been wasted in this man-
ner is, however, attributable to human faults.

The great dust storms showed what ruin could be caused by
wind erosion. The cost of erosion by water is still greater. In
the Great Valley drained by the Missouri, Ohio, and Mississippi
rivers, for example, 25 percent of the tilled lands have been
stripped to the subsoil.

The Mississippi Valley Committee, which estimates the loss
caused by erosion in this region at 400 million dollars every
year, gives this apt description in its report:

"Once smiling regions become a desolate testimonial to man's
folly."

Topography also has much to do with the success or failure
of farming. Rough topography imposes a severe handicap
upon farmers. Steep slopes do not encourage the use of ma-
cinery which can be profitably utilized on level lands. While
steep slopes therefore discourage extensive farming, they do,
however, encourage erosion of the soil. In many parts of the
Southern Appalachian Mountains, the top layer of earth, in
which are found the elements of productivity, washes away
so quickly from the sloping fields that the rich soil becomes
unproductive 3 or 4 years after it has been cleared and plowed.

Climate is chiefly a problem in the western Great Plains.
Insufficient rainfall frequently makes farming impractical. In
these areas, however, pasture grasses, suitable for grazing, will
grow where grains will not. Attempts at farming throughout
the drier sections of the Plains have thrown thousands of farm families on the relief rolls.

Human distress, higher taxes, destruction of fertile soil—these are the costs of the misuse of land. Certainly this is not a problem to be taken lightly.

3 * THE REMEDY

THE FEDERAL LAND USE PROGRAM

The story of the spoliation of our forests and minerals has become common knowledge since, a generation ago, Theodore Roosevelt and Gifford Pinchot launched the first major drive to conserve our natural resources.

It became recognized that the conservation of natural resources was an equally important duty of the Federal and State Governments.

But it was not until 1933 that the first steps actually were undertaken to revise basically the national land policy of the United States, not only to conserve soil, but also—and this is a matter of great importance—to effect a proper readjustment of land and population. Human lives and communities whose economy depended upon land resources became a vital concern of government.

In September 1933, the Soil Conservation Service was established to check the process of erosion by wind and water. In the next year the National Resources Board made a special analysis of the land problem and of the Mississippi Valley as a whole.

In 1934 a program of rural rehabilitation was started to help farmers on relief, who had good land, to become self-supporting. Agricultural experts advised them on methods of farming, and small loans were advanced to enable them to buy seed and implements.
At the same time, Congress felt it was necessary to prevent further settlement on unproductive land. The Taylor Act of 1934 closed the unappropriated public domain to further homesteading and provided for the organization of grazing districts out of suitable public lands.

**THE LAND PROGRAM**

The greatest task was to remedy the mistakes that had already been made. Certain areas where both the land and the people who drew their living from it had suffered severely were first selected. It was proposed to turn these areas into forests, grassland, game preserves, or whatever they were by nature best fitted to be, and to provide for the people who had fruitlessly attempted to wrest a living from these “dead” acres.

In the beginning, this work was carried on by the land program of the Federal Emergency Relief Administration. The Agricultural Adjustment Administration cooperated and provided experts from its Land Policy Section who directed the work in various regions. On May 1, 1935, the land program was transferred by Executive order to the Resettlement Administration. It is now organized as the Division of Land Utilization under the direction of Dr. L. C. Gray who has directed the land policy work of the United States Department of Agriculture for 17 years.

The Resettlement Administration is purchasing 9 million acres of land. To carry out its program, $46,000,000 has been made available to the Division of Land Utilization which will also direct the work of improving the land. To finance the cost of converting these areas to their new uses, the President has allocated $18,000,000, a sum which is providing employment for 55,000 men.

This program is divided into 209 different projects varying in size and purpose. Some of the tracts being improved cover only 35 acres and are to be converted into wayside picnic grounds. Others, the largest of which, located in the western plains, contains 1 million acres, are to be converted into grazing lands.
Wherever possible the land being purchased will be used for a combination of purposes, including forestry, recreation, and wildlife conservation. Other projects have been planned with one major use in mind, and may be classified as being intended primarily for (1) grazing, (2) recreation, (3) migratory waterfowl protection, and (4) Indian rehabilitation.

RESETTLEMENT

All families living on the farms being purchased will be given an opportunity to move to better land. There are at present 16,800 families occupying the tracts selected for purchase. Of these about half will be able satisfactorily to effect their resettlement on better land without help from the Government beyond the purchase of their present farms.

The task of resettling the other 8,400 families has been undertaken by the Division of Rural Resettlement of the Resettlement Administration. The purchase of good land for the new farms is now under way.

The plans for resettling these people will vary with local conditions and with their own wishes and abilities. Each family will be helped to acquire a farm which involves the smallest possible change in the way of life and type of farming to which it is accustomed. Some of these new farms will be in the county in which the family now lives. In other cases it will be necessary to move a greater distance in order to find suitable land.

There are two kinds of resettlement projects, known as the community type and the infiltration type.

In the first, the community project, a large tract of good land is divided into separate farms for the new settlers. The settlement of these new families in a new locality means that new schools and other services must be provided. This, also, is part of the work of the Division of Rural Resettlement.

When it is not necessary to organize a new community the families are settled according to a second plan, that of the “infiltration” project. In the infiltration projects the families are scattered through existing farm communities in small enough
numbers not to overburden local schools and other public services.

These farms are being purchased by the Resettlement Administration and will be rented and in some cases sold, after a trial period, to the new settlers. The advice of agricultural experts will be offered to them through the Agricultural Extension Service. The aim is to give them all a chance to achieve economic independence and the self-respect and comfort corollary to it.

REGROWTH IN THE MIDWEST: A FORESTRY PROJECT

The Bean Blossom project in southern Indiana is an example of what is being done to remedy the misuse of land and to help the people who have suffered from it. The land being improved is located in the southern part of the State in what was once a productive forest area. The soils of this region vary greatly in quality. Some tracts, if properly treated, can be successfully farmed, but much of the land is too poor for agriculture.

People first came to Bean Blossom to work in the lumber camps, sawmills, and other enterprises which the forest supported. Farming was only a side line. When the forest had been completely cut over, employment stopped. Many people migrated to the cities. Others left for the still available farm lands in the West. But a large number stayed on and tried to make a living by farming the poor land. To supplement their meager incomes, they cut down and sold the second-growth trees as soon as they were large enough for use as cordwood or railroad ties. During the depression more people came to the county hoping to support themselves by farming.

Farming of such land has produced little but distress. In contrast to the farmers living on nearby good land, people in the Bean Blossom area are poor, badly housed, and often underfed.

The land itself is fast losing what little fertility it had. Fields have been exhausted and abandoned to erosion by wind and
water. Trees could be grown there. But the poverty of the inhabitants forces them to cut down the young trees as soon as they are worth anything. The people do not have the capital to turn the land to a profitable use.

The poverty of individuals has burdened State and county. Schools and roads must be provided for communities which contribute little to the public revenue. This, just as much as relief, is an unnecessary drain on public resources.

The present use of the land in the Bean Blossom area offers no hope for betterment in the future. Without help there is for these people no way out. They are not trained to work in factories and in the city there are not jobs enough as it is. They cannot, without money, move onto better land. To enable these people to do the work they know and prefer, to put this land to its best use in the interest of future generations, is a task which the Government alone can undertake.

To remedy these evils in the Bean Blossom project, the Resettlement Administration is doing two things effectively. First, it is buying the poor land and reforesting it. Second, it is helping the farmers to move to better land. An obvious result will be to relieve State and county of heavy expenditures on schools, roads, and relief.

On the purchased properties, trees will be planted, erosion will be checked and walks and camping places will be built. Wildlife and public recreation will be encouraged. The entire area will benefit by these improvements. Instead of poor farm land rapidly wasting away, there will be forest land of constantly growing value. The whole area will be turned over to the State of Indiana for administration along with other State-owned forest land nearby.

GRASS IN THE WEST

The project in the Milk River district in the plains of Montana is a similar venture. Settlers in this district have tried to use land for crop farming on which the soil is too dry to yield a marketable crop except in unusually wet years. As in southern
Indiana, the results have been poverty, tax delinquency, and excessive expense to local governments. Large relief payments and crop and feed loans in year after year of drought have brought no improvement. The simple fact is that this land cannot be farmed at a profit; the dust-burned homesteads of the farmers are permanent liabilities to the people who live on them and to the county, the State, and the Nation.

The land cannot be farmed, but it is by nature well suited for grazing. However, the holdings of most of the present farmers, running from 320 to 640 acres, are far too small to be turned into ranches. The Resettlement Administration proposes to buy their land, join it with other tracts in this district which are owned by the Government and make of it all a large grazing range. Needless to say, as on all other projects, no one need sell if he chooses not to.

Running through the center of this area is an irrigation project which still has land open to settlement. Some of the farmers who move from their dry tracts will be helped to settle on this irrigated land where crop farming can be successfully carried on. Others will set up as stock raisers. They will have a small acreage of the irrigated land where they can grow winter feed for their cattle. The grazing area formed by their old farms and adjoining public lands will give them a place to run their cattle during the temperate months.

Certain lands within the county will, of course, be continued in grain farming. Wherever crop cultivation has proved to be a success, no attempt is made to change the use of the land.

This vast area devastated by drought and dust storms, which is today in large part a burden on the rest of the country, will become a profitable part of the national economy.

**FOR THE GENERAL WELFARE**

In the eastern part of the United States there are large hilly regions which in private ownership can be turned to no use that is profitable from a financial point of view. Steep hills, poor soil, valleys, and rushing streams make impossible farming but potentially beautiful parks.
In New England, Pennsylvania, Maryland, Indiana, Michigan, and other thickly populated States, the Resettlement Administration is buying areas of this kind, comprising several thousands acres each. Under the technical supervision of the National Park Service, trails, roads, cabins, and camping places will be built and made available for public use. The land selected for these projects lies in each case within 50 miles of a large industrial population. Their short distance from the cities will make it easy for people of limited means to use them. These regions now inaccessible to the public and virtually useless will be made sources of pleasure and health for present and future generations.

**RURAL ZONING**

Obviously the Government cannot, and does not intend to, purchase all the lands which are being unwisely used. Great reliance must be placed on encouraging private landowners to improve their use of the land. States and counties must be helped in their efforts to husband our natural resources. "Land use planning" is the term applied to this work of devising means to better the use of land, whether privately or publicly owned.

Rural zoning is one of the most effective methods of promoting the wise use of privately owned land. Just as in the cities zoning regulations prevent undesirable building, rural zoning can prevent land from being used in ways that result in public waste.

This system has been best applied in Wisconsin where isolated settlers on unproductive land had for years been a great burden on the public revenues. Zoning ordinances, based on careful land-classification maps made by the State university, have been adopted by the counties in accordance with a State enabling act. Areas unsuited to farming are designated as restricted areas. They may be used for forestry, summer homes, hunting cabins, and the like. But no permanent settlement is allowed. This means that public expenditures on roads and
schools are much less than if there were families living there the year round. The Division of Land Utilization of the Resettlement Administration is studying ways and means to apply this method of control in other States and problem areas.

The States can also restrict the wasteful use of those lands which have reverted to them because of unpaid taxes. Properties which have been seized in lieu of taxes are usually sold again as soon as possible, subjecting new families to vain effort and heartbreaking defeat, and adding to the burden of county and State finances. It is recognized as a better plan to sell only that land which will enable its settlers to become self-supporting. The remainder can be held as public domain in the form of forest land or pasture.

These are two ways the States are helping in the common task. It is recognized that our land can be conserved only by the cooperation of national and local authorities. Attached to the Division of Land Utilization are experts in land planning who consult with State agricultural and conservation officials, thus making certain that the interests of both State and Nation will be considered and the advantages of their combined experience will be utilized.

AN INVESTMENT IN THE FUTURE

The work of land improvement and of resettlement will yield immediate benefits. The removal from public revenues of an excessive burden, the relief of human distress, the new forests and grazing areas and parks will be of direct and tangible advantage to the whole country.

But these immediate benefits are overshadowed by the immense importance of this work for the future. Its success will insure that our land shall always support our people and that a large part of our people shall always be able to live on the land.

The funds that are being spent, the work that is being done, is above all an investment in the future happiness and welfare of America.