

U
PLANS
Land Use Plan

Bishop, California
1949 - 1950

I N T E G R A T E D U S E P L A N

I N Y O N A T I O N A L F O R E S T

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FOREST SECTION - INTEGRATED USE PLAN

INYO NATIONAL FOREST

I. PURPOSE, NEED AND USE

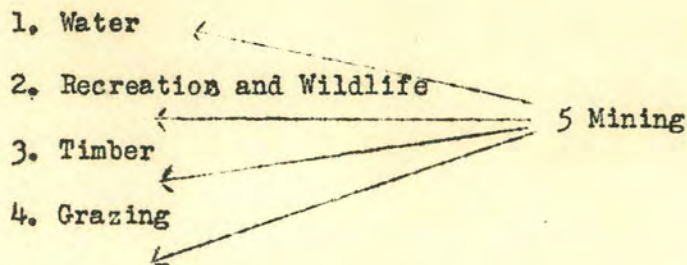
The plan is needed immediately and will be used continuously when completed. It will be used at all administrative levels, but District Rangers will be more concerned with zone plans falling within their respective District boundaries.

The plan will be used in the following manner:

1. It will afford a coordinating key for all resource plans. It will assure compatibility of resource planning where overlaps occur on specific areas and are prepared by individuals in different administrative capacities.
2. The plan will facilitate better administrative decisions and policies where high public values are present.
3. It will assist in resolving conflict in the best public interest and will clarify foreseeable conflicts. It will thus provide time to avoid these conflicts before they attain a problem stage and will reduce the cost and time of resolving problems.
4. It will assure continuity and consistency of Forest administration.
5. It will clarify job priorities for work planning.
6. It will provide a basis for high quality general inspection, both at the Regional and Forest level.
7. The Forest Supervisor will prepare the land use plan with assistance provided by the staff and District Rangers.

II. GENERAL MANAGEMENT RANK

When conflicts occur between two or more resources with high values involved and these conflicts cannot be adjusted or resolved, the higher ranking resource will be given the favorable decision. There follows the general priority rank of the resources on the Forest.



At present mining occupancy does not lend itself to management and will be treated for the most part as private land. Should the existing mining laws be changed, mining will have variable rank depending on comparative values and national emergency needs.

III. LOCATION AND DESCRIPTION OF FOREST

The Inyo National Forest incorporates the southern extension and eastern escarpment of the High Sierras. In addition, it includes a vast area in the Mammoth plateau, Glass Mountain, northern portion of the Inyo Mountains, Pizosa and the White Mountains, parts of the latter two falling in Nevada. The Forest extends from Township 21 South, at Littlelake to the divide north of Mono Lake known as Conway Summit. (See Forest map.)

There are 1,844,017 acres within the Forest boundaries, 56,249 of which are alienated. With the proposed inclusion of the Red's Meadow area of 50,000 acres plus 10,290 acres in the process of acquisition, the ultimate acreage will approach 1,900,000.

Owens Valley separates the Sierra Range from the White and Inyo Mountains and is drained by the Owens River. The area is semi-desert and sparsely covered with drouth resistant vegetation. It is predominantly owned and controlled by the City of Los Angeles and the Grazing Service.

The eastern slope of the Sierras presents a steep broken aspect with a series of precipitous canyons, barren, rugged and inaccessible in appearance, that rise steeply from the Owens Valley to the crest of the Sierras. The higher slopes, both east and west of the crest, with the exception of the King's Canyon National Park, comprise the High Sierra Primitive Area, portions of which are in the Inyo and Sierra National Forests. Because of numerous lakes and streams and scenic attractions, this area has an extremely high recreational value. The canyons are not as inaccessible as they appear. Roads have been constructed up several of the more important ones and afford access by autos to elevations of 10,000 feet.

Elevations range from approximately 4,000 feet on the valley floor to 14,495 feet at the summit of Mt. Whitney. The valley proper is warm and dry in the summer and cold and dry in the winter. Temperatures

run from zero degrees in the winter to well over a hundred in the summer. Annual precipitation varies from less than an inch to six or eight inches. The situation is reversed at higher elevations. The summers are cool and dry and winters usually wet. Heavy snow fall in the mountain catchment areas accounts for the large water flows that drain into and through Owens Valley.

IV. HISTORY OF FOREST ORGANIZATION AND ADMINISTRATION

The Sierra Timber Reserve, created in 1893, contained over 4,000,000 acres and included the major part of the eastern slope of the Sierra Nevadas that is now in the Inyo National Forest. In 1905 the Department of Agriculture established the Sierra Forest Reserve, naming it the Sierra National Forest. By 1908 its area had increased to over six and one-half million acres.

The Inyo National Forest was created by Presidential Proclamation in 1907, and contained 222,000 acres. In 1908 it was reorganized by Executive Order. By transfers from the Sierra National Forest, it was increased to somewhat over a million and a half acres.

The Inyo National Forest as originally created in 1907 took in much of the floor of the Owens Valley. This was done to protect the Los Angeles aqueduct then under construction. Later in 1911 most of the valley land was eliminated and in many points the boundary was put back to the base of the steep slopes of the White Mountains and the Sierra Range.

The Sequoia National Forest was also created in 1908, mainly out of the south end of the Sierra National Forest. In 1910, the Kern National Forest was carved from the southern end of the Sequoia. As established, the Kern National Forest extended southerly from George's Creek and included all of the present Mt. Whitney Ranger District. Later the Kern National Forest was consolidated with the Sequoia National Forest. In 1920, the area forming the major part of the Mt. Whitney Ranger District was transferred from the Sequoia to the Inyo. In 1946, the Mono Lake District of the present Toiyabe National Forest was transferred to the Inyo.

After its creation in 1893, the Sierra Timber Reserve went through many turbulent years. The Inyo area, then called the back country, received little or no administration or supervision. Between 1893 and 1902, nine successive seasons, no inspection trips ever extended across to what was then called the east side. Unrestricted grazing use, which existed prior to the establishment of the Sierra Reserve, continued. The general orders given to rangers between 1893 and 1901 were to put out fires and to keep trespassing sheep out of the Reserve. The west side Rangers had plenty to do near home and the east side got along with no administration.

In 1903 a Ranger came from the west side and took charge of the Inyo District. A small force of short term Rangers was made available and they were principally occupied with following and controlling the nomadic sheep herds that ranged to and from Nevada and the San Joaquin Valley. It was during this period that numerous administrative sites and pastures were developed throughout the valley and mountains. In 1906 a new Ranger was transferred to the area. His administration consisted principally of sheep patrol, trail betterment and construction, and fire fighting.

After 1905 better trained men began to come into the picture. Inspections were being made and personnel had a better knowledge of what they had to deal with, in land, forest, water, people, natural advantages and difficulties. University men trained in forestry began to form a part of the local organization. The Rangers had a better understanding of public service; the establishment of policy started.

In the spring of 1907 the Inyo was assigned its first Supervisor and three Rangers were transferred from the west side. This first administration was concerned primarily with grazing administration and trail development. In 1908 a timber sale was made at Mammoth and a Forest Assistant was assigned to the Inyo. In addition, the Forest Supervisor had an Assistant Supervisor, or Ranger-at-Large as he was called. He was concerned mostly with surveying, mapping and land classification.

In 1911, the organization consisted of a Forest Supervisor, Assistant Supervisor, one Clerk, five District Rangers, one Forest Assistant, two Fire Guards and two Laborers. Administration consisted mostly of boundary surveys, mapping and lands work. It was a period of development; Ranger stations were constructed, etc. Grazing administration continued to take a lot of time and several small sawmills were in operation. Land settlement cases, "June 11ths", with accompanying reports and maps constituted a large part of the work.

After 1918 recreation business showed up in administration. By 1920 better plans were being developed. Recreation and timber management plans were started and grazing plans were revised. In 1926 the organization consisted of four District Rangers, one Forest Supervisor, one Assistant Forest Supervisor, and one Clerk. Grazing administration continued to be heavy, with one small timber sale and many small wood sales. The recreation business continued to increase. In 1928 the Forest reduced the number of Ranger Districts to three. Until 1933 the organization remained the same, with a continuous and gradual increase in recreation and land use business which was stimulated by the betterment and development of Highway 395 to southern California.

In 1933 the organization in the Supervisor's office was sharply increased because of the CCC program. There continued to be three District Rangers in addition to a Forest Supervisor, Assistant Supervisor,

Administrative Assistant, a Recreation Assistant and two Clerks. This was a period of stimulated development. Roads, trails, campgrounds, headquarters buildings and Ranger stations were constructed. Also, some erosion control work was begun.

In 1946, the Mono Lake District was transferred from the old Mono Forest to the Inyo. The organization then consisted of four District Rangers, a Forest Supervisor, a Grazing Assistant, an Administrative Assistant, two Clerks, and a Timber Management Assistant. The latter position was added to the Supervisor's staff in 1945. Recreation and use business became a dominant activity, followed closely by grazing administration and timber sales. Management plans for all resources were being revised and livestock numbers were being aggressively reduced to bring stocking in line with carrying capacities.

In 1949, there were four District Rangers, a Range Management and Fire Staff Assistant, a Recreation and Land Use Staff Assistant, an Administrative Assistant, two Clerks and a Warehouseman, the Timber Management Staff Assistant having been dropped and that activity transferred to the Mammoth District. No change is anticipated in the near future in the Supervisor's Staff, except the addition of a Radio Technician to the Forest and the establishment of one more District which will be carved out of the Mammoth Lakes and White Mountain Districts to secure better balanced work loads.

V. RESOURCES

A. Timber

1. History

First use of timber occurred subsequent to 1852 when settlement aggressively began. Use was confined to foothills and mountains adjacent to settlements, and consisted of Piñon Pine, Juniper, and Jeffrey Pine for homes, mine timbers, and fuel wood. The first heavy cutting, in what is now known as the Mammoth Working Circle, occurred in 1880. A sawmill and narrow gauge railroad were used at Mono Mills to transport timber to Bodie, a mushrooming mining town, for fuel and structural purposes. This operation continued irregularly until 1915, clear cutting over 6,700 acres of land and removing between 50 to 75 million feet of stumpage. After 1915 a small circular sawmill cut timber from around Mammoth proper and continued until acquired by the present Inyo Lumber Company. This company moved to Bishop in 1937 and established a band mill.

2. Volume of Timber Resource

The merchantable timber resource is concentrated in two places on the Forest, in the Mammoth-Mono and Monache-Casa Vieja areas. In the former there is possibly 281,860 feet allocated and 235,000 unallocated. The volume is not known for the Monache area, but is probably not in excess of 100,000,000 feet. It is inaccessible and uneconomic at present, but will undoubtedly eventually move with the Sequoia National Forest timber which it adjoins. Light stands of timber occur throughout the Forest, but are uneconomic because of light volume, inaccessibility, or unusual species.

3. Trend

Originally the timber resource was quite valuable because of local dependency. In the early '20's its management was tied closely to the agricultural economy of the valley and contemplated a production level of box material to meet local agricultural needs. Since that time the City of Los Angeles has acquired most of the farming lands and water rights, and agriculture is no longer a major economic activity. At present 80% of the lumber and box shook is marketed in Reno, southern California and the San Joaquin Valley where it is in competition with the lumber industry throughout the state.

4. Importance - Management Rank and Objectives

The lumber produced is of inferior quality and poor grade. It plays a minor role in local development and construction projects, but the industry employs between 100 and 120 individuals and thus provides stability and balance to the local economy. It ranks third in resource importance on the Forest and obtains primary stature only when water and recreational values are of minor significance.

Objectives of management in areas designated for timber production is to place the stand in a thrifty, healthy condition as rapidly as possible consistent with sustaining an annual cut that will maintain a stable industry in the community.

B. Grazing Resource

1. History

The livestock industry has always been of economic importance to the valley, but more so in the past than the present. No great use was made of the Forest forage resources until after the termination of the Indian Wars. Because of Indian depredations,

livestock was run in the valley and foothills close to settlements. Until the establishment of the National Forest in 1907, unrestricted use was made of the entire Inyo-Mono area. Large nomadic bands of sheep drifted through and over the Forest. It is estimated that at one time as high as 40,000 head of sheep ranged in the White Mountains and 12,000 head of cattle in the Monache area alone. This undoubtedly contributed much to the poor grazing conditions now existing in these areas.

Following the establishment of the National Forest, management for many years consisted of simply placing livestock under permit. Management plans were put into effect in the early and middle '20's, but permitted numbers appeared to have depended more upon the demand than actual carrying capacity of the ranges. Starting in 1944 an aggressive adjustment program was initiated to bring permitted numbers in line with carrying capacities and to solve present or potential conflicts with higher ranking resources. At present 22,333 animal months of cattle and of horses are permitted and 41,509 animal months of sheep. Since 1944, this represents a 33% reduction for cattle and horses and 53.8% reduction for sheep, or an overall reduction of 42.7%.

2. Volume of Resource

The volume of the grazing business on the Forest is not large and it will eventually stabilize at a much lower figure than exists at the present. There are large areas on all Districts containing forage resources that appear to have no better use at present than by livestock. Therefore the grazing industry should continue for many years, or as long as this use is compatible with public interests.

3. Trend

A downward trend has existed since 1944 and will continue until such time as permitted numbers are in line with the carrying capacity of Forest ranges. The overall trend on the Forest can be attributed to aggressive adjustment to secure proper stocking, or to solve conflicts with higher ranking uses. For individual operations, other factors have contributed to the downward trend. The Grazing Service and the City of Los Angeles own or control 90% of the dependent winter range. Grazing Service ranges are stocked to capacity and the City of Los Angeles will give no assurance from year to year that water will be available for irrigation. Because of the drouth in 1948, the City of Los Angeles granted no water to the ranchers for irrigation purposes. In 1949 they granted 30% of former use. This situation is not conducive to stability, some ranches going out of business and others reducing their livestock numbers sharply in line with the carrying capacity of dry pastures. The sheep industry on the Forest depends upon the San Joaquin Valley for winter range,

The pattern of land use adjacent to Bakersfield has changed from open range to irrigated crop land. This change has and will continue to affect individual sheep operations.

4. Importance - Management Rank and Objectives

The livestock industry has been and will continue to be of importance on this Forest, but it is of less importance now than it has been in the past. The livestock business plays a part in rounding out and balancing the local economy of the valley which depends primarily upon recreation, a seasonal business. Because of high public values, grazing is generally outranked by other resources.

Commensurability standards were completely thrown out of balance when the City of Los Angeles acquired the private land. Since that time, only owned private land has been recognized as a basis for commensurability. The wisdom of this policy is now apparent. Prior to the City's acquisition, the mountain ranges were obviously overstocked with preference livestock. Many permits were changed to temporary. Because of the instability of the leased ranches, many failed or converted to other operations. As a result, the Forest was able to recapture stock on many overstocked ranges.

New commensurability standards should be developed, recognizing leased land to the extent of owned land and on a non-irrigated basis. Temporary stock should be held temporary until a safe carrying capacity is attained.

Where unresolvable conflicts occur and high public values are at stake, other resources will be favored over grazing. Objectives of management will be to bring grazing use in line with proper carrying capacity, to assure sustained supply of forage and to maintain soil, maximum flows of water, and recreational values.

C. Recreation and Occupancy

1. History

The first attempt to systematize recreational use on the Forest was undertaken about 1916. Prior to that time, recreation was of minor importance and was enjoyed almost exclusively by the residents of Owens Valley. In 1916, dirt roads from southern California were improved to permit some little automobile travel into Owens Valley, and the first influx of tourists began. Until 1920 the business was more or less incidental and of no great importance.

Roads continued to be improved, automobiles became more generally owned and used for vacation purposes. With the completion of a hard surface highway from Owens Valley to Los Angeles in 1927,

traffic was greatly augmented. Traffic continued to increase with the completion of a modern highway to Gardnerville, Nevada in 1930. By 1920 campers, recreation seekers and vacationists generally became so numerous for the available facilities that Forest administrators were compelled to attempt systematic distribution of traffic and use, and expansion of available areas conveniently located. By 1923 summer home tracts and campgrounds were being established. After the economic pattern of the valley was thrown out of balance by the City of Los Angeles acquisition, commercialization of recreation values increased sharply. At present, recreation and tourist trade is the backbone of the local economy in Mono and Inyo Counties.

2. Volume and Trend of Resources

The recreation business on the Forest closely parallels and has been stimulated by the development of highways and road facilities, the automobile, and population increases in southern California. Recreational use has increased, and will continue to increase. In 1927 an estimated 2,370 individuals visited the Forest for recreational purposes. In 1938, 13,931 persons used the Forest, and in 1949 use had increased to 235,000 individuals. The bulk of the use comes from southern California

Winter recreation now augments the summer tourist season, bridging the previously existing gap between the hunting and fishing season. Since 1940, recreation use development and expansion to meet the increasing public demand is the most important activity on the Inyo. There are many areas on the Forest suitable for recreational use that are still undeveloped, but these areas are not as plentiful as one would think. Water and lack of vegetative cover are serious limiting factors. Lack of adequate funds and the good possibility that southern California's population will reach 13,000,000 persons by 1960 presents a potent problem.

3. Importance -- Management Rank and Objective

Second only to water, recreation is the most important resource. The Inyo Forest contains extremely high scenic and recreational values because of its rugged topography, numerous lakes and streams and cool summertime climate. It is readily accessible to southern California, and provides a recreational outlet for people living in congested metropolitan areas. In addition to its high public value, recreation and tourist business constitutes 75% of the local income.

It is neither expected or planned that our development will ever meet the demand. We have always operated on a philosophy of ever expanding developments to meet recreational demands. Sooner or later we must recognize that a saturation point exists and controls

will then be necessary to limit use to established recreational carrying capacities. Objectives of management will be to make available and manage suitable areas for public recreation to the extent of our available funds, compatible with other resources; in so doing to preserve natural beauty, giving first consideration to development that will serve the greatest number of people.

D. Water

1. History

Because of the high altitude and very rugged and precipitous nature of the eastern escarpment of the Sierras, nature has provided storage of the limited precipitation that falls in the form of snow. Large quantities of water have always been discharged into the valley floor from these watersheds. First use of this water was made by Indians who irrigated limited areas of Taboose grass that grew adjacent to the stream courses. The roots and nodules on the roots provided a starchy food.

Prior to 1890, irrigation canals had been constructed throughout the valley by local residents for irrigation. Because of periodic drouth, it was recognized that storage reservoirs were necessary to secure an adequate supply of water at all times. To this end the local people applied to the Department of Interior in 1890 for permission to use certain public lands for reservoirs. In 1889 Federal legislation was provided for investigation of the possibility of reclaiming arid regions by irrigation. In 1903 a Federal engineer was assigned to Owens Valley with instructions to look for potential irrigation projects. He recommended the withdrawal of 565,000 acres of public land within the scope of irrigation projects. Some twenty-eight projects were contemplated and recommended. At this time local people withdrew their applications in favor of the Government projects.

In 1904 the Secretary of Interior was notified that the City of Los Angeles was interested in diverting water to that city, and possibly the Federal Government should step aside in favor of the City of Los Angeles because they then would assume the financial burdens of construction and storage. In the fall of 1904, a Mr. Fred Eaton of Los Angeles, who had been a frequent and casual visitor to the area, recognized the financial opportunity presented by the large volume of pure water. In the fall of 1904 and the spring of 1905 he purchased land and water rights, and secured options on riparian lands along Owens River and on potential reservoir sites that were privately owned to the value of \$1,000,000. In 1905 Mr. Eaton presented his plan and possibilities to the City of Los Angeles and a deal was made for the city to buy his property, options and easements. In 1907 the Reclamation Service abandoned their planned projects.

Announcement of the city's plans for an aqueduct started wholesale claiming of water rights, especially along the Owens River and tributaries. During this period of turmoil every user of water had to fight for his rights. In 1906 aqueduct plans were under way to carry 20,000 inches of water to Los Angeles, where it would be used for domestic purposes and irrigation in Los Angeles proper and in the San Fernando Valley.

The Forest Service came into the picture in 1907, when Chief Forester Gifford Pinchot favored the City of Los Angeles plan and withdrew most of Owens Valley land for Forest addition to protect the purity of the aqueduct supply. Both the Bureau of Reclamation and Forest Service were subject to severe criticism. The aqueduct was completed in 1917. It was 233 miles long, cost approximately \$25,000,000, and carried 480 second feet of water.

Four years passed with no material change, but the subject and antagonism by local people was not wholly quiet. In 1918 the city began tapping the underground water supply, and in 1919 went to Congress for more grants. Individual power developments were under way, but the city's attempt to block these developments failed. A cycle of dry years began in 1921, and continuous draft of underground water by the city was beginning to affect local farms. To assure ample water supply, local ranchers and water corporations began impounding water in the form of small dams for storage. The city dynamited these dams, and also one constructed by the Forest Service in Rock Creek.

Los Angeles in a move to eliminate the rancher problem began the wholesale buying of land, in many cases securing control of local water distribution corporations. Dry years and unfavorable conditions caused the valley's credit to be badly shaken. Violence by the city was met by violence of the local people. In 1924 the Inyoites dynamited the aqueduct near Lone Pine and also several wells. Local ranchers demanded the city pay prices for their lands set by the terms of the owner. Another blast shattered the aqueduct in 1926 and dynamiters gave the aqueduct little rest in '27, six different blasts occurring. An immediate effect of this lawlessness was the placing of armed guard by the city along its property and along the highway.

Bank failure in 1927 caused unfavorable conditions and assured most people of the gradual decline of farming. Already three hundred and twenty-five families had moved from the valley. The city put appraisers in the field and prices were arbitrated. The pattern of agricultural economy was doomed, families left, business declined, and still other businesses failed.

To help stabilize conditions, the city then developed a plan of land rental, both for residential and agricultural use. This plan of rental continues at present and is an important factor in

balancing out local economy. The feeling of resentment by local people, at a lesser degree of turmoil, has continued up to the present time. From time to time the city has continued to secure or has attempted to secure legislation to protect themselves or favor expansion. These attempts have always been vigorously opposed by local people and local government.

2. Volume of Resource

No reliable figures are available at this time as to the water potential on the Forest. The Bureau of Reclamation at one time estimated that a normal supply of 554,965 acre feet could be secured. It is known that the high elevation watershed is extensive and that in normal years it yields more water than can be used locally or by the present facilities of the City of Los Angeles. The vast underground water supply has scarcely been tapped.

3. Trend

The trend in water yield in spite of frequent cyclical variations has been downward for many years. For the past two years the output has scarcely kept the aqueduct flowing at capacity. As a result, there has been little or no water available for local irrigation purposes.

Ultimate plans for the use of Inyo-Mono water in southern California are problematical. Many potential reservoir sites are available and undeveloped. With their development another aqueduct would necessarily have to be constructed. Another aqueduct will never be constructed and a dependence developed until sufficient water is available to handle two aqueducts during drouth periods. With the anticipated population increase in southern California, more water will be necessary. If the needs of the south can be met in the great central valley of California or by the Columbia River or the Colorado River, water from this area will no longer be needed and an agricultural economy may again develop. At present, 75% of the domestic water in Los Angeles comes from the Inyo-Mono area.

4. Importance - Management Rank and Objective

Water is the most important single resource on the Forest. Few places exist in California where the conservation and proper management of watersheds is more important than the Inyo Forest. Here is located the headwaters of the Kern, Owens and great San Joaquin Rivers. They replenish large reservoirs and supply water for domestic, irrigation and power purposes to remote areas in the San Joaquin Valley and southern California.

Maximum use and expansion of natural resources both within and without the Forest cannot be accomplished without an ample water supply. Water and the assurance of maximum flows is the highest ranking responsibility on the Forest. Our management objectives will be to manage all related resources and uses in such a manner that the water resource will provide the maximum contribution possible. We shall preserve, maintain and use Forest water sources in the best public interests.

E. Mining

1. History

The early history of Inyo and Mono Counties indicates that development and progress was initiated by the mining industry. Many of the first pioneers came to this area because of their interest in gold and silver. Many of the historical ghost towns that are found throughout the areas sustained populations in excess of the total county population at present. Because of a lack of transportation, the early mining industry was primarily concerned with high grade gold and silver ore. As transportation facilities developed, greater interest was shown in less valuable but important minerals. The national defense emergency between 1940 and 1945 stimulated active interest and development in what is known as strategic minerals. Active prospecting and mining of lead, molybdenum, tungsten, copper and zinc took place within this area and on the Forest. In many instances roads and other development costs were financed by the Government. Following the war, these operations continued but are less active than during the emergency.

2. Volume and Magnitude of Resource

The Inyo National Forest is highly mineralized throughout, the California Journal of Mines and Geology listing no less than twenty different minerals. Valuable deposits of tungsten, lead and molybdenum are located on the Forest at elevations in excess of 12,000 feet. Volume figures are not available, but it is known that large volumes of strategic minerals have been blocked out and will be mined when prices are sufficiently high or a national emergency occurs.

3. Trend

No particular trends are evident in the mining activity. The industry has fluctuated sharply with varying market values and the recent national emergency. Since 1945, activity has stabilized at a level somewhat higher than that of the pre-war period. Future activity will undoubtedly closely follow the pattern of the past.

4. Importance - Management Rank and Objectives

Mining is undoubtedly one of the important industries in the local economy. In recent years, numerous building material, i.e., asbestos, clay, pumice and talc mines have come into the picture. In 1937, the value of all minerals produced in the county was \$1,439,029. Between 1880 and 1937, total mineral production was valued at \$76,203,000. A rough estimate of the number of people engaged in the production of minerals in this area at the present time would no doubt approximate 2,000.

The operation of the mining industry and the nature of mining laws does not lend itself to the same degree of planning and control as do some of the other resources on the Forest. For the most part, mining in this plan will necessarily have to be treated as private land. Because many of the highly mineralized zones lie within recreational areas, sharp conflicts are bound to occur. Adjustments will have to be made, and they should be commensurate with the values involved. The objectives of management, wherein management is possible, should be to foster legitimate mining where it is in the public interests to do so, providing other resource values are considered.

F. Wildlife

1. History

Before the coming of white men, Indians were the sole users of fish and game in this area. Trout were not native to any of the streams north of Tunnel, but the Indians caught the native suckers. When the pioneers first arrived deer were scarce, apparently being at a low peak in a population cycle. Quail, sagehen and rabbits were plentiful and were used regularly by the early settlers. Deer apparently increased, especially in the northern part of Inyo County and the southern part of Mono County, for records indicate that market hunting was practiced extensively in Long Valley and deer and antelope meat sold to mining camps at Bodie and Aurora. Antelope were particularly plentiful, as were sagehen, quail, rabbits and waterfowl.

Around the turn of the century deer again became scarce and remained so until the early '20's. Heavy competition by sheep use on the limited winter range may have been an important factor. As late as 1915 and 1920, a deer brought into town was an interesting spectacle. Aside from life history studies, census, bag limits and other regulatory laws, upland game birds and big game animals have never received any management. In 1949 a game management man was assigned to this area by the State Division of Fish and Game.

It is not known exactly when trout were first introduced to this region, but it is known they were brought here from Nevada by stockmen many years before 1900. Shortly after 1900, the State Division of Fish and Game began stocking lakes and streams, primarily with transplants from other areas. This was, of course, a tedious and expensive job. It was not until after the Mt. Whitney Hatchery was completed that an aggressive program of stocking was started. Eggs were first secured from the coast and from the upper Sacramento Valley. The first heavy fish plantings occurred between 1915 and 1930. With the rapid increase of recreational use, sport fishing became big business on the Forest and in the valley. With the development of two more hatcheries and the assignment of a Fish Biologist to the valley, fish rearing and planting became a major activity of the Division of Fish and Game in this area. At present, 52% of the poundage reared in California are planted in Inyo and Mono Counties. Lake stocking by airplane was initiated in 1949 and shows great promise.

2. Volume of Resource

Deer are the most important big game animals on the Forest. There are more deer now than there ever has been in the history of the area, and serious overstocking exists on winter ranges, both on and adjacent to the Forest.

A herd of Tule Elk were introduced into the valley proper several years ago, and this herd has increased until now the population is estimated at 700 or 800. These elk now use National Forest areas and have become a problem to local ranchers. Although the elk were introduced primarily for preservation purposes and scientific interest, periodic and regulated hunts have been adopted by the Division of Fish and Game to control numbers.

Wild duck, sagehen, pheasants and quail are present, and are hunted mostly outside of the Forest boundaries. Population of upland game birds and waterfowl are generally low. Chukar partridges have become established in the White and Inyo Mountains and are increasing rapidly. Hunting will undoubtedly be permitted in the near future.

3. Trend

Trends in deer population have increased sharply since 1920, which has already created serious overpopulation problems on winter ranges. These problems will continue to become more critical until aggressive management measures are taken to reduce populations to the carrying capacity of available forage.

The population of upland game birds is low and will continue to be low until water is again available in the habitat, or until dry lands are again placed in agriculture.

The fish population is high and increasing, but will vary in direct proportion to availability of funds for rearing and planting. Management of trout on a sustained production basis is a thing of the past for highly accessible streams and lakes. Management is being practiced in high mountain lakes that are lightly or moderately fished. They are being stocked with species that can reproduce themselves in lakes. In other cases, spawning grounds can be developed in streams entering lakes. When this is accomplished, they too will become self supporting.

4. Importance - Management Rank and Objectives

Wildlife is an integral part of recreation and is given equal management rank. In 1949, it is estimated that 128,925 fishermen and 17,490 hunters used the Forest; 2,085,431 fish were planted, many of which were catchable size, averaging four fish to the pound. The deer population has increased from 2,650 in 1926 to 38,000 in 1949. There are 403 miles of streams and 7,253 acres of lakes. With this potential wealth of wildlife resources, it is understandable why it ranks so high. Without this resource, recreation and local business would suffer a sharp decline.

Fish and game are owned by the State; therefore, our management objectives will be to manage our related resources in such a manner as to improve the habitat of wildlife species, or at least in such a manner as not to be detrimental to existing suitable habitat; to keep alert to use, needs and trends of wildlife using the Forest, and recommend to the responsible agency needed management practices; to cooperate with the Division of Fish and Game and Wildlife Service in every way possible to foster a balanced wildlife population on a sustained production basis; to participate in big game range surveys, censuses and planning; to participate in planning improvements.

VI. GENERAL FOREST PROBLEMS OR CONFLICTS

A. Recreation Congestion

Congestion in our recreational areas and campgrounds exists at present. This congestion has resulted in abuse to facilities and unsupervised camping in areas where no facilities exist. Camps that were developed for twenty units now handle forty to sixty parties. At present there are 864 developed camping units on the Forest, capable of handling 2,765 persons per day. Actual use of these facilities is near 6,000 per day. In 1946, there were 389,900 man days of use. In 1950, there were 552,000 man days of use, which represents approximately a 42% increase since 1946. No expansion of facilities has occurred since the CCC program. The population in the Los Angeles metropolitan area and vicinity is now 4,000,000

persons. It is expected that there will be 10,000,000 individuals in this same area by 1960. The congestion problem is serious now and will become progressively worse.

RECOMMENDATION

It is recommended that continued effort be made to secure adequate funds not only for maintenance, but for development. The potential exists for the development of areas that will handle four times the present number of people. These areas have been approved and set aside for recreational purposes. If it is impossible to secure regular funds for development purposes, efforts should be made to secure legislation based upon a pay-as-you-go system whereby recreation will be self-supporting.

B. Water Pollution and Sanitation

National, state and local authorities have emphasized the need for pure water. Water free from pollution and contamination is becoming more important in the economics of the state and nation each day. The Dickey Committee for the State of California and the state health authorities have made intensive surveys and studies in the Inyo-Mono area. Water pollution and sanitation in our campgrounds is a serious problem, but one that can be corrected with adequate funds to finance improved services.

RECOMMENDATION (Same recommendation as for Section A)

Public attention must be focused upon the problem in order to secure adequate allotments of money or legislation that will permit recreation to be self-supporting.

C. Grazing Commensurability Standards

Formal establishment of commensurability standards for the Inyo Forest has never been done. The Forest has used the minimum standards established for the Region. Because of the unusual pattern of land ownership involving the City of Los Angeles, there has always been a feeling that special commensurability standards should be developed for this area recognizing the unusual character of ownership and long-term leases issued by the city.

RECOMMENDATION

It is recommended that commensurability standards be established based on the minimum standards required by Regional policy. Many of the existing permittees are not now commensurate and will never be commensurate. The Forest is operating on a reduction program, and by continuing these permits on a temporary basis the Forest has been able to secure large reductions from time to time of temporary livestock, and will continue to do so until adequate stocking in balance with carrying capacity is obtained. When satisfactory stocking is finally reached, it may be desirable to develop special commensurability standards for this area.

D. Acquisition

Because of the small amount of land in private ownership within the boundaries of the Inyo National Forest, acquisition presents no great problem. Most of the timber producing lands within the Mammoth Working Circle have been acquired and there remains only about 800 acres of timber land yet to acquire. Small isolated parcels of private land, varying from 40 to 160 acres are scattered throughout the Forest and present problems because they control water or are located on lands highly desirable for recreation development.

RECOMMENDATION

It is recommended that first priority for acquisition be to complete the acquisition within the Mammoth Working Circle of those timber producing lands still in private ownership; second, to secure, if possible, those areas controlling water on our grazing lands by the use of water purchase money; and third, the acquisition of small key areas for recreational purposes. It is also recommended that at an early date an acquisition plan be developed, based on the integrated land use plan completed in 1950.

E. Primitive Areas

At present, there is one primitive area and two wild areas within the boundary of the Inyo National Forest, and there are three main problems involved.

1. Old commercial uses that were established prior to the creation of the primitive area, or were permitted subsequent to creation of the primitive area through error.
2. Because much of the primitive area is highly mineralized, there is a continual problem of mining access roads.
3. Many of the boundaries for the primitive area have been poorly located and are delineated in such a manner as to include country that is flat and accessible and not primitive area quality, or are so located that they cross the center of lakes which create difficult administrative problems.

RECOMMENDATION

1. All of the commercial uses now existing within the primitive area have been placed on a tenure. It is recommended that these commercial uses be cancelled as their term period expires unless, in the meantime, primitive areas are abandoned.
2. When necessary to issue special uses for mining roads within the primitive area, it is recommended that low standards be required except for grade and drainage. When these mines have been exhausted, the roads rapidly become high-grade trails. Protest attempts to patent.

3. It is recommended and has been planned to re-study all the boundaries of primitive areas on the Inyo National Forest and recommend to the Regional Forester that adjustments be made. These conflicts and adjustments have been set up in the Land Use Plan.

F. Range Reductions

Because of overuse or conflicts of higher use, the Inyo National Forest has been on a reduction program for the last five years. As a result, there has been an average over-all reduction in animal months during this period of approximately 42%. The Forest is rapidly getting on top of this problem and there only remains two or three areas where additional reductions will be necessary.

Many of these reductions have been accomplished by knowing what was wanted, and by taking advantages of transfers and sales. The Forest has not attempted to make wholesale forced reductions, but has adopted the policy of making two or three forced reductions a year and acquiring any slack that developed.

RECOMMENDATION

It is recommended that forced reductions continue to be made, but not on a wholesale basis. Slack should continue to be recaptured, and within five years the grazing problem should be well in hand. Because of high water and recreational values, it is recommended that no increases be granted and the Forest be maintained on light or moderate stocking basis.

G. Over-Population of Deer

There is no over-stocking by deer on the summer ranges, except in the Monacha area where migrations from the Park and the Sequoia funnel through portions of the high country. However, serious over-population problems exist on the winter ranges adjacent to Owens Valley from Pine Creek north of Bishop to the Forest boundary on the south. The winter ranges on the north in the vicinity of Chidago Canyon and Pizona present no sharp problems at present, but the deer population is ever expanding and overuse problems may eventually result.

RECOMMENDATION

It is recommended that every effort be made with the Division of Fish and Game and local sportsmen's groups to eventually permit the reduction of herds where necessary on winter ranges. In addition, the Forest, together with the Division of Fish and Game, should initiate surveys and forage studies on the winter ranges to the north to be alert to any problems of overuse that may be developing there.

H. Erosion Control

In spite of the continuous reduction in grazing use, many locations on the Forest are in poor condition because of ancient, heavy gully erosion. No program short of heavy engineering projects involving large expenditures of money will ever solve the problem or place the watersheds in satisfactory condition.

RECOMMENDATION

It is recommended that watershed project surveys be made and plans prepared that will designate the treatment, type of structure and cost necessary to rehabilitate such areas.

I. Mining in Recreational Areas

Wherever minerals occur in recreational areas, conflicts are certain to develop. Many mining claims so located are of doubtful value during ordinary times, but their importance gains magnitude during periods of national emergency, particularly if the minerals are of a strategic nature. In addition, some of the areas so taken up are obviously fraudulent and are in reality recreational areas taken up under the guise of mining claims.

RECOMMENDATION

It is recommended that we contest all attempts to establish claims in areas that we have withdrawn for recreational purposes. In addition, it is recommended that where heavily mineralization occurs within high value recreation areas, that additional withdrawals be effected. In those areas where claims are already established, it is recommended that we protest any attempts to patent where recreational values are extremely high. It is recognized that when national emergencies occur and strategic minerals are involved, mines will be established and we will have to live with mining. However, it is also recognized that mines do become exhausted, and at that time we should be in a position to salvage recreational values.

J. Timber Management Plan

The Timber Management Plan has been completed for the Inyo National Forest and, except for a couple of minor amendments or adjustments, it is ready for approval. Much of the area included in the Working Circle is either on potential or existing recreation areas.

RECOMMENDATION

Those areas within potential recreation areas should be studied carefully and great care and good judgment be exercised in logging them so as not to jeopardize future recreational values. It would appear that those areas in the Management Plan now under developed

recreation should not have been included in the Management Plan. In 1958, when the Land Use Plan is to be revised for the Mammoth Unit, it would be well to take a critical look at those timbered areas now heavily developed by recreation with the objective of possibly eliminating them from the Working Circle.

The presence of rust is more widespread and serious than originally believed. Priority of areas to be logged and degree of sanitation cutting must be considered before final approval of the Management Plan.

K. Water Power

The use of water for power purposes appears to be gaining magnitude each year. The City of Los Angeles and California Electric Power Company are continually making plans for or developing new power projects. Such developments almost always involve streams of water valuable for recreation.

RECOMMENDATION

It is recommended that the Forest be continually alert to power projects involving the diversion of recreational water. Recreational values should be preserved by requiring minimum flows of water to be allowed down these streams to maintain and preserve recreational values. In addition, there are several streams on the Forest that are now dried up because of water diversion. When these F.P.C. permits come up for renewal, we should require that water be allowed down these streams to restore recreational values.

L. Special Use Residences

There now exist on the Forest many special use residences or tracts that are occupying space badly needed for campground sites or other public use.

RECOMMENDATION

As rapidly as the recreational area plans are completed and it is definitely known what special use residences are occupying sites more valuable for campgrounds, the individual permittees should be notified and a record established in the files that should their structures be demolished by fire or otherwise, they will not be allowed to rebuild in that area. Furthermore, should sales and transfers be involved, they should be notified that the new permittees will be placed on a limited tenure at the end of which time the residences will be removed.

Furthermore, to permit the Forest Service more latitude and freedom in the future for eliminating special use residences, any new permits issued on the Forest should be done so on a term basis with the complete understanding in writing by the permittees that at the end of the term the developments will be removed if needed by the Forest

Service for higher use. In line with this, it would also be desirable to require structure designs of a size and arrangement that such improvements can be easily moved at the end of the term period.

VII. FOREST UNITS AND ZONES

The units are rather large natural administrative areas and serve primarily to orient the administrator and focus attention and thinking. The boundaries are determined by conflicts and problems. Such problems or conflicts developing within the area, because of location and natural features, must necessarily be resolved within the unit. A unit may include one or more Ranger Districts, or there may be several units within a Ranger District. Administrative boundaries play no part in the delineation of unit or zone boundaries.

The zones are the smallest breakdown of the planning areas, and run from two to ten to the unit. Their boundaries are delineated by a combination of natural topographic features, resources and use. Plans, policies and objectives are specific within the zone and will be used mostly by the District Rangers and staff assistants for both resource and work planning. All independent effort by Forest personnel within a zone is automatically coordinated and administration progresses in an orderly manner with a minimum of conflict or problems, and in the best public interest.

There follows an outline of the Forest units and zones:

I. MAMMOTH-MONO UNIT

1. Leevining Zone
2. June Lake Zone
3. Mammoth Zone
4. Reds Meadow Zone
5. Bald Mountain Zone
6. Glass Mountain Zone
7. Rock Creek Zone

II. ADOBE HILLS UNIT

(No zones)

III. PRIMITIVE AREAS UNIT

1. Hoover Wild Area
2. Mt. Dana-Minarete Wild Area
3. High Sierra Primitive Area

IV. WHITE MOUNTAIN UNIT

1. East Side Zone
2. West Side Zone

V. OWENS VALLEY UNIT

1. Pine Creek Zone
2. Buttermilk Zone
3. Bishop Creek Zone
4. Coyote Zone
5. Big Pine Creek Zone
6. Tinemahah Zone
7. Independence Creek Zone
8. Shepherds Creek Zone
9. Whitney Portal Zone
10. Lone Pine Zone

VI. INYO MTS. UNIT

(No zones)

VII. KERN RIVER UNIT

1. South Fork Kern River Zone
2. Main Kern River Zone