

UNIT RECREATION PLAN

for the

SIERRA BUTTES RECREATIONAL AREA

by

Alvin F. Wright

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Approved: *[Signature]*

Redacted for privacy

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INTRODUCTION

The proper development and systematic organization are essential in any line of work. Our National Forest playgrounds stand in need of more systematic and extensive development. By the adoption of proper design and construction, we will not only preserve our recreation areas for continuous future use; but will also make them more efficient for present use and this efficiency will permit more intensive and extensive public use.

There can be no question but that on many areas within the National Forests we have reached the stage where more carefully regulated use is essential to the preservation of the recreation areas themselves. At the present time, unregulated use is resulting in tramping and burning out the ground vegetation, trees are being mutilated, shore lines along streams and lakes are loosing their beauty and interest, roads are becoming winding lanes of dust, and the sanitary conditions are causing a great deal of concern on the part of our health authorities. In order to remedy these conditions it will be necessary to set up regulations and develop these intensively used areas in a more efficient manner.

A Unit Recreation Plan can be the solution to many of these problems if properly constructed and administered.

PURPOSE

With the increasing trend for more and more people to visit the forests each year, there comes a greater demand for increased recreational planning. With this in mind I have developed a unit recreation plan for an intensively used area.

LOCATION AND AREA OF THE TRACT

The Sierra Buttes Recreational Area is in the north eastern corner of the Downieville Ranger District, Tahoe National Forest; T. 20N., R. 12E., M. D. M. Downieville, California. The area covers all of the Salmon Creek drainage northwest of the Gold Lake Road, which is a secondary highway joining Highway No. 24 on the north. This area also includes the headwaters of Sardine Creek, southwest from the Gold Lake Road. At the headwaters of Sardine Creek lies Upper, Lower Sardine Lake and the Pond.

The Sierra Buttes Recreational area includes approximately 3200 acres, surrounded by many additional acres of valuable recreational forest land.

ACCESSIBILITY

The Sierra Buttes Recreational area is easily accessible from many large cities of population, both from the State of California and Nevada. The main highway serving this recreation area from the south and east is the Yuba River Highway No. 49, a good oiled two lane road passing, within three miles to the east, of the recreational area. This highway serves Nevada City and Sacramento Valley to the south and Reno, Nevada and vicinity to the east.

The Gold Lake road, a secondary state highway, joins the Yuba River Highway No. 49 with the Feather River Highway No. 24, a distance of 13 miles. This highway serves the northern cities and communities.

From either Highway No. 49 or 24 the Gold Lake road

leads directly to the recreational area. From the Gold Lake road improved gravel roads lead throughout the area.

CLIMATE

The summer climate is without any question the most delightful in the entire state, since it affords a change from hot, dry and burning climate of the lower valleys to one of generally warm days and cool nights.

Temperature

The temperature averaging around 90 degrees F. at the hottest part of the day from June 15 to September 10. The nights as a rule, are rather cool, but whenever there is a strong east wind blowing there is very little difference in temperature between night and day; however, this only happens a few times during the summer.

Rainfall

Because of the high elevations, the climate is rather variable and abrupt from season to season. The stories told by the early visitors were almost entirely dry summers, with many thunderstorms, but recent years there has been some rain every month in the summer and fewer thunderstorms.

Snowfall

The winters are characterized by heavy snows, averaging around eight feet over most of the area. The snow becomes soggy and packed, and usually stays on late in the spring, opening up about the middle of June. Snows usually stop travel early in the fall.

TOPOGRAPHY

The topography changes rapidly from rolling hills and level meadows to rugged, steep slopes and moderately deep canyons. Towering almost straight above Sardine Lake to the south are the Sierra Buttes with their steep cliffs and radiating ridges. This portion is more broken and rugged than the northern portion due to the numerous knife-like ridges, and small, but steep peaks surrounding the southern and western portion.

The northern and eastern portion has many rolling hills extending to the Yuba Pass with few rugged peaks.

ELEVATION

The elevation vary from 4000 to 9000 feet above sea level with the average elevation about 4500 to 5000 feet above sea level.

FOREST COVER

The chief cover, for the most part, is with timber of alpine and sub-alpine types, consisting mostly of Engelmann spruce (*Picea Engelmannii*), noble fir (*Abies nobilis*), mountain hemlock (*Tsuga mertensiana*), silver fir (*A. amabilis*), alpine fir (*A. lasiocarpa*), Lodgepole pine (*Pinus contorta*), and western white pine (*P. monticola*) may be found in fairly pure stands in one or more places. Here and there a few young trees of ponderosa pine (*Pinus ponderosa*) may be found coming in among the lodgepole pine. Even though much of the area is timber there are many large meadows suitable for pasturage,



Salmon Creek Drainage



Topography around Sierra Buttes



Forest cover type around Meadows



Type of forest cover found along
Salmon Creek drainage

and many patches of snow brush, aspen, manzanita, and white thorn. There are parts of the area on which not only grass, trees, or shrubs grow, but also beautiful wild flowers, that are peculiar to the high country, the most notable being wild sunflowers, Indian paint brush and many others. This offers a rich field for those interested in the study of flowers.

There is practically no timber of commercial importance on the area for the reason that most of the country is too high, too steep, too remote, too rough, and too poor in soil quality to produce good commercial timber. What little commercial timber there is will be preserved for recreational purpose, as most of it is within the Sardine Lake and Salmon Creek drainage, the two most important recreational spots in this area; furthermore, there does not appear to be any danger of a commercial demand on this timber in the immediate future because of the excessive distance and high cost of transportation to market.

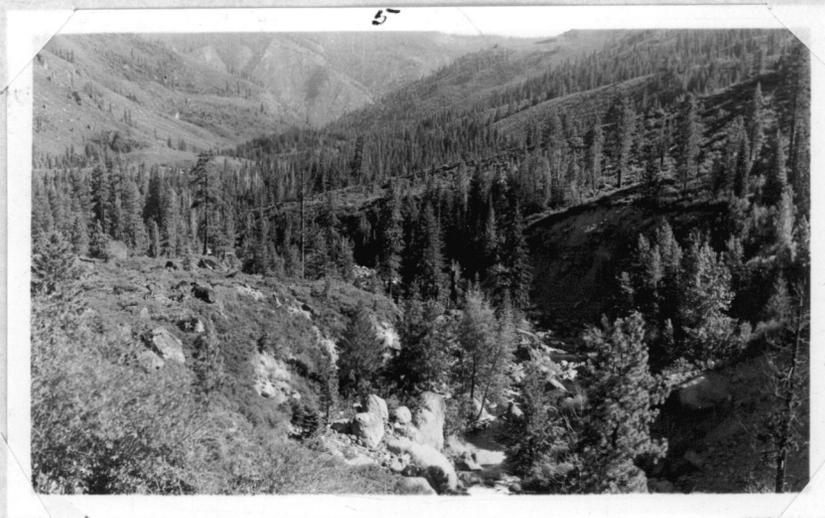
NATURAL PHENOMENA

Geological formations.

This entire high country shows the evidence of ancient lava flows, and other volcanic disturbances.

The condition of most of the area presents the vision of a terrific explosion at some time followed by a wearing down by weather and in some places by glaciers.

Some of the lakes within a short distance from Lower Sardine Lake present this appearance, because their settings



A view of the granite rock which covers much of the area around Sierra Buttes.



Sierra Buttes from Gold Lake Highway, showing small glaciated areas.

Demanded

are in pits, that are not unlike craters in appearance, have volcanic rock bottoms, and are usually surrounded by somewhat of a rim composed mostly of volcanic rock similar to that on the bottom of the lakes and jumbled about like some explosion of gigantic proportions only could do. Around the base of Sierra Buttes you can find numerous piles of grey granite-like rock, piled helter-skelter as if by some tremendous power. *crater*

Scenic possibilities.

For the individual who likes a good Forest Service trail on which to climb a mountain and yet be able to look out over the surrounding country from the Buttes, there is the trail to Sierra Buttes Lookout which leaves the lake and terminates at the lookout, four miles to the south and west. Mt. Shasta to the northwest, Saddleback Mt. to the west, Red Mt. to the east, and Grouse Ridge to the south, are just a sample of some of the prominent objects that may be seen; then, in addition there may be seen eight lookouts, some of which are in the Plumas National Forest, to say nothing of the numerous lakes scattered throughout the summit area.

There are many trails leading to the more inaccessible lakes, away from the heavier used areas, whereby one can try his or her luck at fishing in some of the more secluded spots.

Along the many trails and roads leading throughout the area, there are beautiful wild flowers, and rare plants that are peculiar to the higher country; also the Trembling Aspen makes an aesthetic setting with their leaves fluttering in the soft breeze.

WILD LIFE

Fish

The type of fishing water is for the most part lakes, of which Upper Sardine and Lower Sardine are the most important.

There are many additional lakes that can be reached both by road and trail within a short distance of this area. Some of these are Packer, Tamarach, Saxonia, Salmon, and Deer Lake.

For those who prefer stream fishing will find Salmon Creek very enticing. This is the only stream of any importance within the area.

All the lakes are excellent fishing: containing rainbow and eastern brook trout. The State Fish and Game Commission are constantly stocking Salmon Creek and all the lakes in the area, as they operate a hatchery at Indian Valley only twenty-five miles away.

Game

This area is an excellent environment for forest and migratory game, as there is plenty of cover, water, food and not an abundance of predators, although there are some to be found.

Among the forest game species, black-tailed deer, few mule deer, and various species of grouse are probably the most notable. Most of these animals spend the entire year within the forests of this area.

The migratory game is well represented, especially in the fall of the year, as the lakes make excellent resting and

feeding grounds for the migratory ducks and geese.

Among the predators on the area especially those on game birds and animals, the cougar, coyote and a few species of hawks are the most important; these apparently are few in number, as only a limited number have been seen during the past year or so.

There are at present no accurate statistics on the hunting drain, but what there is, is not serious to any extent, as there are very few deer, only a few bears, and probably only a very small amount of grouse killed by hunters each year. Probably the greatest drain to the game birds and animals, exclusive of migratory game, is that by the predatory animals and birds, but this drain is relatively small as compared to the increase in the various species. On the whole, the game is increasing each season within the area.

There are a few furbearers in this area including beaver, mink otter, fisher and martin.

Other Animals and Birds.

Other animals and birds that are not classed as game, predators, or furbearers are found throughout the area such as the chipmunk, squirrel, blue jay and very often one runs across a bob cat, which to some may be classed as a predator, to others as a furbearer, and, still, to others as a forest dweller without any special classification. In fact the area is teeming with the various small animals and song birds; even an eagle or porcupine can be seen occasionally.

USE BY THE PUBLIC

This area is the most intensively used recreational area within the Downieville Ranger District. There are approximately 2000 people visiting this area annually. Within a radius of 110 miles this recreational area serves the following cities: Reno, Nevada with a population of 23,000; Grass Valley 10,000; Nevada City 2000; Downieville 900; Sierra City 1,000; Marysville, California 9,000; in addition to the following cities named there are many smaller towns depending upon this recreational area for their wholesome recreation. This represents a very important item since these people do not pass through (as there is no through road), but really come wholly for recreation purposes. Although, the recreational use of this area is by a cosmopolitan group, the great majority comprises those people interested in wholesome recreation, and with the proper development and maintenance this class will continue to increase. The area has never appealed to those who seek the less desirable forms of recreation since there exist no dance halls, questionable resorts and other forms of amusements which would attract them.

EXISTING DEVELOPMENTS

Located within this area two attractive resorts, Sardine Lake Lodge and Salmon Lake Lodge, which are becoming increasingly more popular each year; also, two government camp grounds, Packer Creek and Packer Lake.



Sardine Lake Lodge



Packer Creek Camp Ground

Lodges

Sardine Lake Lodge - located on a government special use site. This lodge has over-night accommodations for eight people and a sandwich and coffee shop to accommodate twenty people. The following recreation is available; boating, fishing, horse-back riding and over-night pack trips.

Salmon Creek Lodge - located on privately owned land. This lodge has ten cabins completely furnished for rent by day, week or month; also, full meals are served daily to accommodate forty people.

The following recreation is available; boating, fishing and hiking.

Campground

Packer Creek Campground - this area has been partially developed by the forest service. There are accommodations for ten camps within the area. Each camp has a heavy table and stove. Two latrines and garbage pits are available. The water is piped through the center of the campground with four hydrants spaced throughout the area for convenience to the camps. The greatest recreational use is fishing, hiking and boating.

AREAS OF GREATEST CONCENTRATION

There are two heavily used spots that have a fluctuating usage.

The most heavily used campground on this area is Lower Sardine Lake especially around the Pond which is used entirely for bathing. This spot has large crowds concentrate for only

a few hours on the beaches while swimming; in addition to the regular campers.

The other heavily used spot is Salmon Creek campground. During certain weeks throughout the summer months large organizations gather for their group outings.

DETAIL DEVELOPMENT OF THE INTENSIVELY USED AREAS

Sardine Lake Camp Ground

Area - 30 acres

Value - This area has been set aside for picnic and greatest use.

Cover - Lodgepole pine and Trembling Aspen with a few scattered young ponderosa pine make up most of the forest canopy. The more open spots are covered with manzanito.

Commercial Developments - Sardine Lake Lodge, boat house and light plant.

The suggested detail development of this area is shown by a map enclosed in the appendix.

The development plan provides for picnic and campgrounds with additional improvements on the commercial site together with service developments of roads, trails, parking lots and etc.

It is generally advised that commercial development shall be entirely invisible from the public use area. It will be noticed in the plan that the commercial site including the lodge, boat house and light plant is not thus entirely screened from view. Because of the existing forest cover and its location, the size of the lake and the existing topography complete

screening is not possible with a development which will provide an attractive locality for the lodge and boat house.

The commercial developments are, however, placed upon the most desirable site available and is partially screened from the public area. It can be seen from certain places but not generally; again, it is considerably above the level of the lake and with an open view to the lake with the Sierra Buttes in the background, which provides a very scenic feature in connection with the lodge.

The site, while desirable for a commercial development, would not be desirable for a public campground. The picnic area and campground occupy the greater portion of the usable area and generally speaking, the most desirable.

It has been the idea to so design the public areas so that nearly all those who use them can find the type of picnic spot which they desire. The camping areas are intended to be developed in such a manner that maximum of privacy will be afforded the users, and each camp will be a unit within itself, containing an individual parking area, stove, table and place to pitch a tent.

The water supply and sanitation facilities are planned so that pure water will be furnished in a faucet within easy distance of each camp. Toilets will be within 300 feet of every camp. Garbage will be deposited in garbage pits within 300 feet of each camp.

A dressing room has been located close to the parking area for those wishing to go swimming.

A parking area has been built for the swimmers that come



Sandy beach along edge of Pond



Typical beach scene



Sardine Lake Campground, taken across the Pond with Sierra Buttes in the background.



Fishing in the Pond

to the Pond for this type of recreation. This will relieve the congestion of traffic along the one way roads throughout the camping area.

Roads and trails have been provided for circulation among the camps. Both of these developments are to be as inconspicuous as possible. Additional trails and roads will be constructed as these are demanded in the utilization of additional adjacent land.

An outdoor fireplace will be built close to the Pond for a community gathering.

Should future expansion be necessary as the usage increases many additional camps can be added by developing more areas along the lodgepole flat to the north east.

This area has definitely been set aside for picnic and campground usage as the recreational opportunities are desired by so many users that it would not be advisable to use this area for other uses. Other uses would restrict the area to a few, as compared to the great number that can enjoy the recreational opportunities by having the area classified as picnic and campgrounds.

The policy on this area at the present is, the greatest good to the greatest number for the longest time, and this will continue to be the future policy for the Sardine Lake campground.

Salmon Creek Campground

Area - 30 acres

Value - This area has been set aside for picnic and camp-

ing as its greatest use.

Cover - Lodgepole Pine, Sugar Pine and Aspen make up the forest canopy of this area.

Water frontage - Approximately 900 feet along the north bank of Salmon Creek.

The suggested detail development of the area is shown on a map included in the appendix.

This development plan provides for picnic and campground together with the suggested service developments of roads, trails, and etc.

There are no commercial developments planned for this area.

It has been the idea to so design the area that large groups may have sufficient room for large camps, also, there will be many individual camps. These camps will be developed in such a manner that maximum of privacy will be afforded the users and individual areas will contain parking area, stove, table and a place to pitch a tent.

The water supply and sanitation facilities are planned so that pure water will be furnished in a faucet within easy distance of each group. Toilets will be within 200 feet of every camp. Garbage will be disposed of in garbage pits located within 150 feet of each camp.

Roads and trails have been provided for circulation throughout the campground area. Both of these developments are to be as inconspicuous as possible. Additional trails and roads will be constructed as these are demanded in the utilization of additional adjacent land.

This area has been chosen as a picnic and campground for its desirable location on the bank of Salmon Creek and with excellent possibilities of future expansion as the need becomes necessary.

SANITATION AND IMPROVEMENTS

The water supply for Sardine Lake campground will be taken from Upper Sardine Lake. There will be no camping or swimming allowed on or near this lake. This will be necessary for sanitary conditions as this is the only source of water for the campground.

The water supply for Salmon Creek campground will be taken from Salmon Creek, one mile above the campground, at a point where the creek starts to drop rapidly to the flat upon which the campground is located.

The soil is such that sanitary conveniences can be installed without undue difficulty.

GRAZING REGULATION

This area has been closed to all commercial grazing. The only grazing allowable on this area is by the special use permittee, which consists of 22 head of horses for saddle and pack stock. These will be restricted to the large meadow above Salmon Creek campground.

FIRE PROTECTION

Looking down on the area is Sierra Buttes Lookout. The entire area can be covered from this lookout with less than a

three mile visibility. With this detection fires will be spotted immediately and prompt action can be taken.

The fire season is very late in this area due to the high elevation and the many meadows that are continuously wet until the snow has melted.

There are two main areas fo concentration within this recreational area. Lower Sardine Lake campground and Salmom Creek campground. These areas have natural fire breaks on three sides. A fire break willbe built along the fourth side to enclose the entire area within a fire break. Additional improvement work such as thinning, pruning, and cutting excess brush will be necessary on parts of the area to relieve hazardous spots.

A twenty-five man tool cache will be maintained at the lodge.

With the late fire season and improvement work finished the fire risk will not be too high.

CONCLUSION

Recreational use is far in advance of recreational development and may cause destruction of many outstanding recreational areas unless plans are immediately made and executed. In the past, little real thought has been given to the selection and development of these areas. The public almost wholly determining the selection and use, with the result that many areas have been worn out or badly damaged through over use.

With the application of this unit plan to the Sierra Buttes recreational area, it is hoped that the recreational opportunities can be preserved and made more attractive to the many visitors that enter this area each year.

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**Specifications
Important in Recreational Planning**

Camping Sites:

Size - 25 ft. x 50 ft.

Spacing - 100 ft. or more between centers depending on
screenage conditions.

Picnic Sites:

Need not be as large as camping sites since tent space is
not required. Screenage need not be so complete as for
camping sites.

Parking Areas:

Size - 10 ft. per car x 20 ft.

Campsite spurs - 12 ft. x 20 ft. at 45° angle.

Reserves and Buffer Zones:

Area within 50 ft. or more of water hydrants, springs,
latrines and stream banks; and within 100 ft. or more
of lake shores, natural parks, playgrounds, picnic
grounds, parking areas, etc. should be excluded from use.

Roads:

Main roads - 66 ft. right-of-way

18 ft. roadway, double track

Secondary roads - 33 ft. right-of-way

10 ft. roadway, single track

One-way, meandering, single track loops are generally
preferred.

Scenic Strips:

Sighting distance from highway and topography controls width.
A maximum width of 300 ft. on each side should suffice.

Summer Home Lots:

Size - 1/3 acre or more

100 ft. x 150 ft. or larger

Toilets:

Should be distributed such that they are within 300 ft. of all
camp sites. A greater radius is permitted for picnic sites.
Requirements - 1 double unit per 5 tables or per 30-40 persons
- well screened
- signs

Trails:

Winding loop foot trails are preferable.

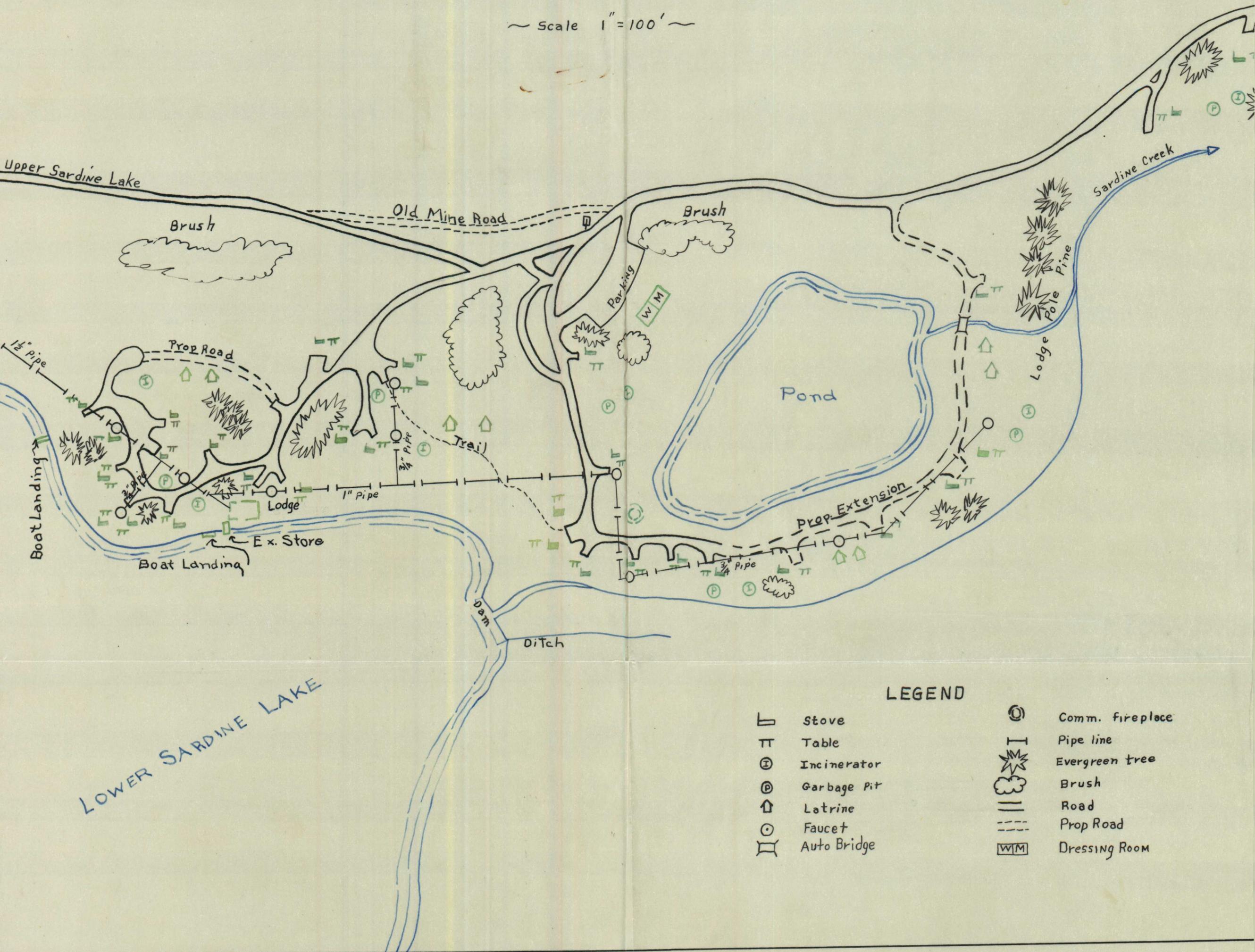
Water:

Requirements - Summer homes with baths and flush toilets, 40 - 50 gallons per person per day.
Camp grounds without flush toilets, 5 gallons per person per day.
Supply should be located within 300 ft. of users.

LOWER SARDINE CAMPGROUND

Sec. 10, T.20 N., R.12 E., M. D.M.

Scale 1" = 100'



LOWER SARDINE LAKE

LEGEND

- | | | | |
|---|-------------|-------|-----------------|
| ⌊ | Stove | ⊙ | Comm. fireplace |
| π | Table | I | Pipe line |
| ⊕ | Incinerator | ★ | Evergreen tree |
| ⊙ | Garbage Pit | ☁ | Brush |
| ↑ | Latrine | | Road |
| ○ | Faucet | - - - | Prop Road |
| ⌌ | Auto Bridge | WM | Dressing Room |

SALMON CREEK CAMPGROUND

Sec. 3, T. 20 N., R. 12 E., M. D. M.

Scale 1" = 100'

LEGEND

-  Stove
-  Table
-  Incinerator
-  Garbage Pit
-  Latrine
-  Evergreen tree
-  Deciduous tree
-  Prop. Road
-  Water pipe
-  Faucet

