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NEWBERRY CRATER RECREATIONAL AREA

BY

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SEMINAR PAPER

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This seminar paper deals with the factors that effect recreation in the Newberry Crater Area. I have tried to present the subject in such a manner that it will be found interesting to the ordinary individual and at the same time contain enough technical information to be of value to anyone interested in the area from a forester's standpoint, or from the standpoint of a prospective special use permittee.

I have chosen this area because I have been familiar and interested in it for many years; because it contains two lakes which I believe are the best fishing lakes in Oregon. They have received nation wide attention and their popularity is increasing year by year at a tremendous speed. Up to now the area has just naturally taken care of all its visitors, and all forest service development has been very extensive. Now, because of the increasing popularity, I feel that the forest service and the resort owners in the area have a problem on their hands. They both have to expand. The forest service must develop better camp-ground facilities, roads, trails, etc. The resort owners must expand and see that their lakes remain stocked with fish, for if it were not for the excellent fishing afforded, almost everyone who visits the area, it would not have the attraction it has today.

I do not plan to bore my reader with detailed campground,

resort or summer home site plans, because I feel they are desirable only when they can be used on the actual locality itself. I will however, show the different types of recreational areas and uses that the Forest Service has planned for and briefly point out the outstanding characteristics of each.

I have written this paper under paragraph headings so as to make reading simpler. First I have taken up generalities including location, geology and topography, climate, cover, history etc. Next I have given the Forest Service policies in regards to the area and then discussed the existing and needed developments of the area.

### Newberry Crater Recreational Area

#### Location and Accessibility

The area is located in the Paulina District of the Deschutes National Forest in T. 21 and 22 S., R. 12 and 13 E., WM., Deschutes County, Oregon. The area is in the center of the Paulina Mountains twenty-four miles south of Bend, and eleven miles east of Lapine. The area is oval in shape, being about five miles long and four and one half miles wide. Two lakes, Paulina and East Lakes are located in the center of the area.

The area is easily reached in about an hour's drive from Bend by the Dalles California Highway and the Paulina Creek forest road. The crater is only accessible to use from about



May 15 to November 15 because of heavy winter snows that block the road.

### Geology and Topography

The area is a crater similar to Crater Lake only of more recent origin. The Newberry caldera once consisted of a single lake but subsequent vulcanism made two lakes and left the area with several groups of hot springs. The original mountain, it is believed, was blown up and then sank back down in its hole leaving one large lake and later eruptions separated the lake into two parts by building up a cone in the middle. Evidences bearing out this theory are found by the steep sides of the crater rim, and the conical shaped mountain that remains in the center of the area between the two lakes.

This soil is pumice, and there are other lava inclusions present in various phases of metamorphosis. Large black obsidian and lava flows appear in this region. They are mountainous in character and very interesting to the visitor. The rim of the crater rises with varying degrees of steepness from the crater floor to 1600 feet above the lakes. The elevation of the lakes is approximately 6350 feet.

### Climate

The climate is ideal for summer recreation with a maximum temperature of about 90° and a minimum of 40°. However during the spring and fall and during the night the temperature falls considerably lower. The snow stays on late in the spring and starts to fly early in the fall, sometimes as early as the middle of September. In the winter



the lakes freeze over except for the area near the hot springs. The snow sometimes reaches a depth of twenty feet. The area is protected from the wind and very seldom do the lakes become very rough.

#### Cover

The chief cover is lodgepole pine which ranges from pole-like patches to brushy park-like trees. Hemlock is found mixed with the lodgepole on the higher ground and on the moister sites. The ground cover is scattering consisting of monor grasses and shrub-like plants. It is best described as open except on the burned over areas on which lodgepole reproduction has come up in thickets. Some dwarf juniper is found in the area but it is of squatty character, and not very abundant. Manzenitti, snow brush, and chemice are the main shrubs and are found in varying degrees of density. Many places the lodgepole has grown thick and even-aged and is tall and pole like. Many of the trees in such stands are dying in large quantities and have fallen and make an undightly area. In general the beauty of the cover of the area is not striking and it cannot be said that it is an attraction or an aid to recreational management, for in many cases it becomes a problem.

#### History of the Area

The Paulina Mountains are named for a renegade Indian chief who became quite a notorious character and who was reputed to have carried on his escapades all over central

and eastern Oregon and then returned to this region to hide.

The earliest development of the area was the building of a dam across Paulina Creek to store the water in the lake for irrigation purposes. This water right is still in use and has caused some conflict with the more recent development of the area as a public recreational center. The first special use permit issued by the Forest Service was for a health resort at East Lake, which made use of the hot springs for bathing purposes. This resort has now developed until now the springs are of only minor importance compared to the other interests.

About 1926 a special use permit was granted for a resort at Paulina Lake, which since has developed into the leading resort of the area. The other uses of the area include a pumice mine on the west shore of East Lake, summer homes, and club sites.

#### Use

The 1936 census taken by the Forest Service and the resort owners shows that approximately 15,000 people visited the area. Of these it is safe to say that 14,000 were fishermen and the rest were composed of nature lovers, mountain climbers, health seekers, picknickers, and summer home owners and guests.

#### Policies and Objectives in the Administration of the Area

The forest Service has set this area aside for recreational purposes and no other forms of occupancy or use will

be allowed that will impair the recreational values and all Forest Service administration of the area will function to further recreational advancement .

The grazing values in the area are negligible, and the area is closed to all form of grazing use.

No timber management will be practiced on this area. The chief cover consisting of lodgepole pine has no present commercial value. Local fuel needs and house logs can be supplied by the area away from lakes and roads in unfrequented places as designated by the forest officer.

This area will never be used by logging companies for railroads or truck roads for logging timber because there is no commercial timber in the area and all adjacent timber has a much better outlet from different angles.

This area is located in the Paulina Game refuge. No hunting or shooting is allowed in the area. The chief game is mule deer, and black bear. The deer are very plentiful in this region during the summer months and become very tame.

Eastern Brook and Rainbow trout are very plentiful in both lakes. The game commission has installed and maintains a fish screen at the outlet of Paulina Lake. A section of each lake, plainly marked by buoys, is reserved for spawning and egg taking.

The abundance of fish in the two lakes is the great attraction to this area. Fish have been transplanted in these two lakes with great success because of the abundance



of food that exists there for them. Last year for a period that lasted about 6 weeks, there were many days when as much as 1 ton of fish would be taken out of East Lake alone and on week ends there would be about four to six tons taken from the Lake. For the past five or six years the fishing has held up like this with each succeeding year seeminhly somewhat better.

The screening of the outlet of Paulina Lake has been quite a problem to the game commission. It is necessary to keep a screen over this outlet because Paulina Creek is used for irregation purposes and is shut off in the winter. In the past they have lost millions of fish in this creek. Today they have a screen but it is inadequate because many fish still get through and are doomed to die when the water is shut off in the fall.

Each year the game commission takes eggs in both lakes. The number of eggs varies with the year but they usually get about 3 million from this area.

The area, due to its open cover and relative dampness is not of high fire hazard type. On the fire hazard map, put out by the experiment station, it is listed as number 4 which is the lowest hazard. No special hazard exists because of the recreational use as promiscuous camping is not allowed. The area on the east shore of Paulina Lake is closed to camping due to the excessive hazard in comparison to the rest of the area. When this area is needed it will be fireproofed and

people will be allowed to use it. Periodic inspection during the fire season by the forest guard and the district ranger is made in connection with their other duties to check fire conditions and public compliance with the fire regulations. Brush from local cuttings are not allowed to accumulate.

Great care is taken by the forest service to keep the area in a sanitary condition. The pumice soil serves as a very good guarantee of public health as far as water born diseases are concerned. Toilets and garbage pits are located well away from the lakes and water supplies. Incinerators are used on the larger camp grounds for garbage disposal.

The forest service has complete supervision and control over the area except for the water right on Paulina Lake water. There is no private land or other public land agencies in this area. There is a definite increasing need for more adequate supervision of the area by the forest service due to the increase in the number of forest users. This increases the fire hazard and calls for supervision to see that regulations are carried out. Up to date there has never been a man stationed in the area. There are administrative sites provided for and there is a definite need for one of these sites to be developed and a man stationed there during the heavy recreational season, both from the standpoint of fire protection and public contact.

#### Forest Service Improvements in the Area

The only road into this area is the Paulina Creek

Road which enters the area near the outlet of Paulina Lake on the west and leaves via East Lake on the east. The road is a good forest road adequate for the present and expected future use, being built by the CCC in 1933. However five miles of this road near the Dalles California Highway which is not in the National Forest is in the need of betterment. Some roadside clearing along the last two miles of the road up to Paulina Lake would open up the canopy along the road and let the sun in, thus enabling the road to be opened earlier in the spring. Some work of this kind was started last year but was not completed. This is the only major road in the entire area. There are minor roads going along the east shore of each lake that were constructed by fishermen and are in poor condition, and are not adequate in case of future development of the areas.

The Paulina Peak Lookout Trail leaves the road at the west end of Paulina Lake and leads to Paulina Peak. It was constructed so that a lookout could be established on the Peak. It is still used for this purpose but has developed into a popular recreational trail, as the view afforded from the peak is excellent. Relocation of the trail in a few places would afford a better scenic view and reduce the grade and otherwise the trail is very satisfactory. The Trail is approximately 3 miles long and the average tourist can walk to the peak in one hour and 45 minutes. A trail is proposed along the crater rim forming a complete circle. The trail would



be approximately 13 miles long and would be both for recreation and protection. It would tie in very nicely with the protection plan because it would be located along the summit of the rim and this region is quite subject to lightning fires which at present are often difficult to get to. The forest service also plans to build a recreation trail around each lake with a connecting trail between. Part of the trail around Paulina Lake has already been constructed and the location for the remainder has already been made. These trails would be primarily for recreational as an aid to fishermen and hikers.

The forest service plans for this area provide for seven campgrounds, three of which are being used at present. The facilities at each campground are about the same and development has been quite extensive. The Paulina Lake Camp is the largest and most used and a discussion of it will bring out the important points in regards to all the campgrounds. This camping area is provided with toilets, tables, well pumps, and garbage cans. There has been no other improvements and there are no designated places for roads or camping spots. The area is level and people drive or camp wherever they want. The result is the camp is cut up and very dusty. Camping is not distributed as it should be and many campers are found crowded together. A thorough examination of the area should be made and a definite plan decided on for each camp ground to eliminate some of the difficulties that now

exist in them. It must be remembered that the very nature of the area does not lend itself well to good camping sites. The ground is bare of any vegetation that would tend to keep down the dust. The cover is sparse which allows cars to be driven almost anywhere. It is recommended that some planting be done and that barriers be put up to keep the cars in specified places. The campground contains no playgrounds which can be used by children. The average stay of a family in the area is about 4 days. The adults are engaged in fishing but nothing has been provided for the young children. If playgrounds were incorporated in some of the campgrounds it would be an advancement in the recreational development of the area. Two campgrounds are now being used at East Lake and their conditions are about the same as exists in the Paulina Lake Camp. One more automobile camp is to be developed at Paulina Lake when it is needed and the remaining camps are to be hikers and boatman's camps, more or less primitive in nature and undeveloped. There will be no road into these camps.

At Paulina Lake there is a need for a place for fishermen who bring their own boats to put them in the lake. As things are now they back their trailers up the water wherever they can and much confusion and inconvenience exists. A location near the campground could be made into a convenient boat landing for people with their own boats.

Scenic strips and natural parks are set aside to preserve

the beauty and scenic value of the lake shore and roadsides, and these areas are not desirable for development from this standpoint. Naturalness of the area is to be preserved to the fullest extent, and they will include all areas along the lake shore that are not set aside for intensive use. Many interesting geological formations are included in these areas.

There has been four organization sites set aside in this area, one of which is now developed by the Odd Fellows Lodge. They have developed a modest fishing lodge here with a good dock and clubhouse. The area is well secluded from other uses which is necessary for a tract of this type. One other site will be made available by automobile and the others will be reached only by trail or boat and these sites will be reserved for organizations like the Boy Scouts.

The commercial tracts consists of three resort sites, two of which are under successful permit, one at each lake. The Paulina Lake Resort was started in 1926 and development has been quite slow but satisfactory. At present the improvements consist of a hotel, boat house, dock, eight cabins, store, ten tent houses, electric lights and running water. All construction has been made very thorough out of peeled lodgepole logs. The construction cabins rent for eight dollars per day. Grass has been planted so as to give the area a clean appearance without the city look of a lawn. The owner has about 50 boats to rent and it is from these that a large part of his income is realized. The other site on this lake is



set aside for a health resort to be developed if there is ever a demand for it. It is planned that it could best be handled in conjunction with the present resort. Probably the development will consist of a hotel or cabins to which the water from the hot springs will be pumped for bathing purposes.

The East Lake resort, as previously states, was first started as a health resort because of the hot springs located there. Soon the fishermen became more numerous than the bathers so it became necessary to make the improvements over to some extent. The resort has been handled poorly up to the past few years and has gone into the hands of the receivers many times. The present owner, however, has made a success of it and has now started to build a new layout which will replace the rather decreped looking old buildings. He plans to build a fine new hotel and a number of cabins.

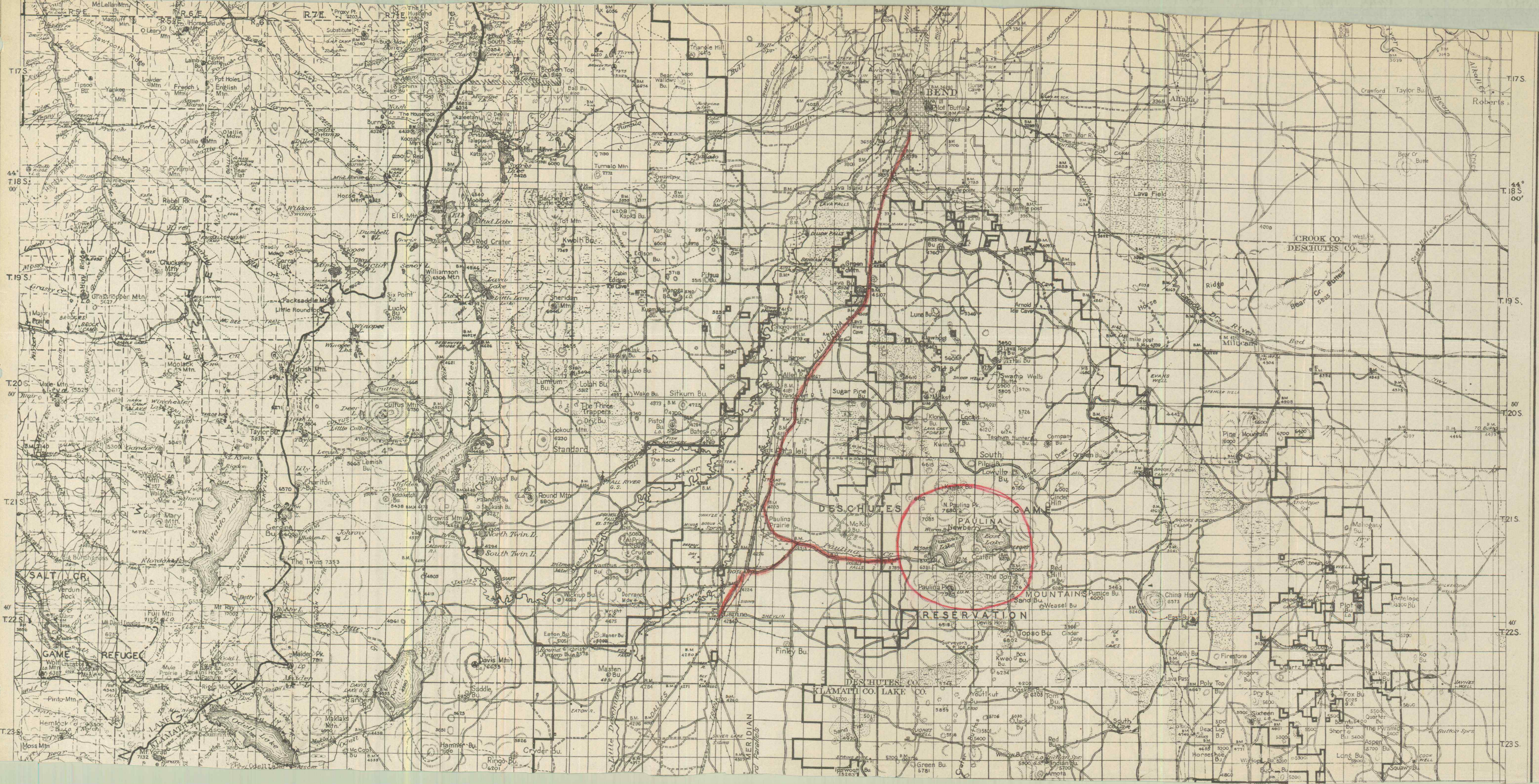
As soon as the forest service finishes its trail building program there will be an opening for someone to start a stable in this area and rent horses to the campers. There has been some demand for them already but it would not be worth while until there are more trails on which to ride.

Summer home sites have been laid out in this area, but the idea is comparitavely new and not many permits have been issued. The only tract opened up at present is on Paulina Lake and some very nice locations are available.

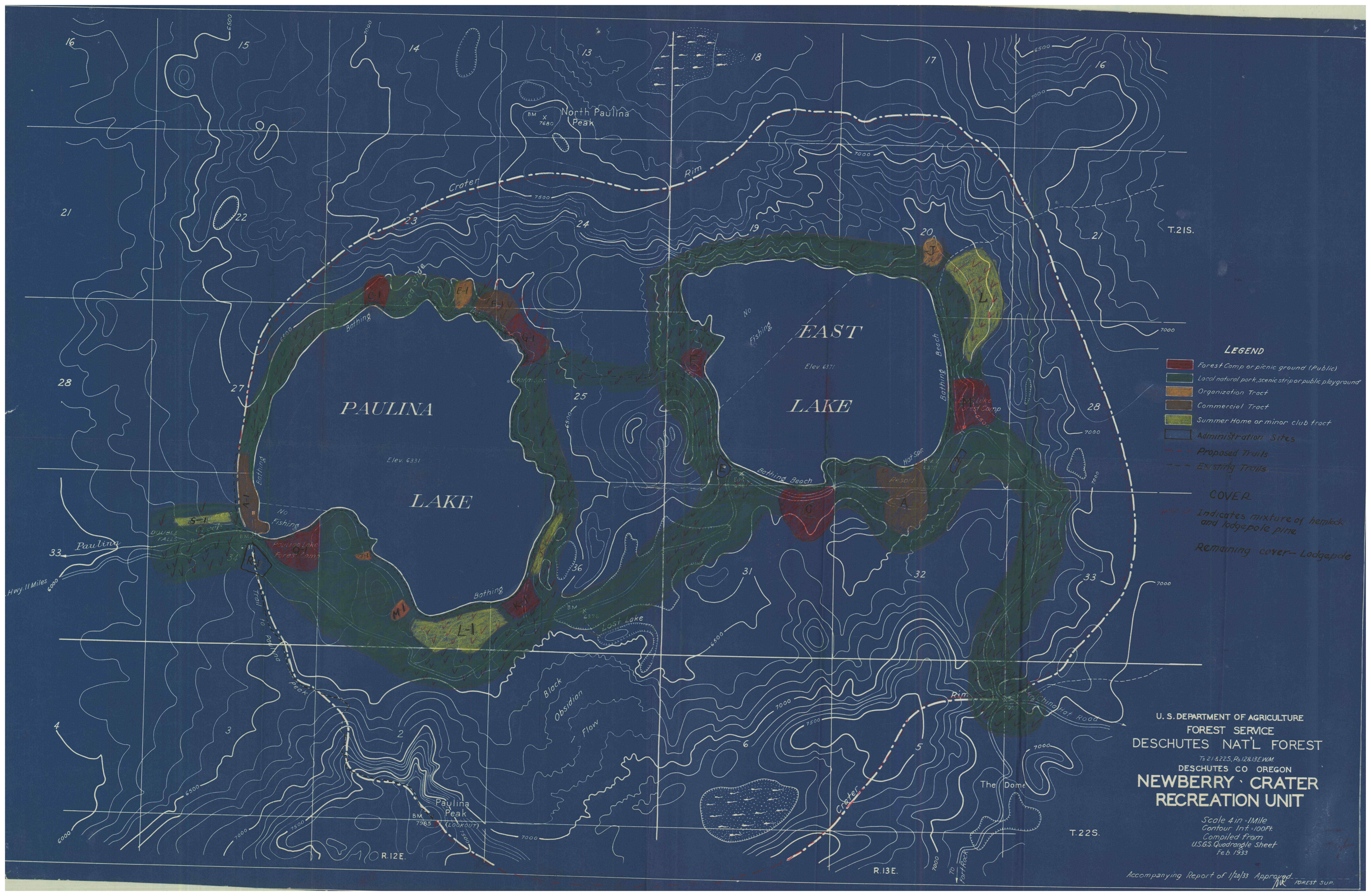
A summary of the different sites in this area is as follows:

	<u>Number</u>	<u>Acres</u>	<u>Lake Frontage(in feet)</u>
Forest Camps	7	113	5,200
Scenic Strips	11	1595	33,100
Organized Tracts	4	32	1,700
Administrative ""	3	55	300
Summer House Sites	4	109	5,300
Resort Sites	<u>3</u>	<u>50</u>	<u>2,400</u>
Total	32	1953	48,000









**LEGEND**

- Forest Camp or picnic ground (Public)
- Local natural park, scenic strip or public playground
- Organization Tract
- Commercial Tract
- Summer Home or minor club tract
- Administration Sites
- Proposed Trails
- Existing Trails

**COVER**

Indicates mixture of hemlock and lodgepole pine  
Remaining cover—Lodgepole

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
DESCHUTES NAT'L FOREST  
T. 21 & 22 S., R. 12 & 13 E. WM  
DESCHUTES CO OREGON  
**NEWBERRY CRATER  
RECREATION UNIT**

Scale 4 in = 1 Mile  
Contour Int. = 100 Ft.  
Compiled From  
USGS Quadrangle Sheet  
Feb. 1933

Accompanying Report of 1/24/33 Approved  
FOREST SUP.