

THE LOCAL ECONOMIC EFFECTS
OF A
PROPOSED NATIONAL PARK
IN THE CALIFORNIA REDWOODS

prepared for
U. S. National Park Service
Department of the Interior

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FOREWORD

This report is the product of a study undertaken to evaluate the effect of establishing a major national park in the California redwoods. The economic effects on Del Norte and Humboldt counties in their entirety and in the area immediately adjacent to the park are the fields of inquiry.

The study has followed and benefited from a preceding investigation of the North Coast as a whole by the author for the National Park Service, in which the economic future of all major activities was evaluated. An earlier study made in 1956 by the author for the same sponsor and the Pacific Southwest Field Committee provided an introduction to the area and its economic problems, as well as a basis of comparison with recent years.

The findings herein are based on the premise of a national park proposal of approximately 30,000 acres, including about 10,000 acres not now preserved as well as the recently discovered world's tallest trees, with both upland and coast. The park would include ten miles of outstanding, wild, ocean frontage. The present economic analysis is also related to a proposed level of development, park staffing, concession policies, and management plans. Prepared by the National Park Service as a premise for this and related studies, they are preliminary and tentative. Changes therein can require amendment of the following pages and conclusions.

In order to prepare a report of this kind in which there are projections into the future, it is necessary to make assumptions concerning the unknown. Most of these are stated in the course of the report but one is worthy of restatement here. It concerns the rate and amount of visitor spending in the park vicinity. The assumption is that a supply of goods and services will be available to the visitor as a result of private enterprise and investment. In order for visitors to carry out their willingness and desire to satisfy their needs and wants, the supply must be there. This report appraises the potential spending by the groups attracted by the park, assuming adequate supply.

On the same subject it may be worthwhile to note that the potential spending forecast is conservative in two respects: it is not by any means a high rate of family spending compared to areas where there are a great variety of inducements such as amusement parks and beaches and downtown urban centers; secondly, very moderate allowance has been made for a higher rate in future due to a rising standard of "recreation living."

Summary

The proposed national park will attract to the North Coast several million visitors annually who will contribute to the economy of Humboldt County and Del Norte County substantially more than the park will displace in its first years. This is the principal finding of the study, based on the information developed within the scope and resources provided.

The park will be located in an area near the Humboldt-Del Norte county boundary. It will be large and not a casual stop. Given a system of routes to invite and facilitate stay-over by the visitor this will be a park for vacations similar to such great parks as Yosemite and Yellowstone. Its location will favor very high visitation, both because of access from major through north-south and later east-west routes and its proximity to other places of great interest to travelers such as the Oregon Caves, Crater Lake, Lassen National Park, Mount Shasta, the Trinity Alps, and the grandeur of the coast in Northern California and Oregon.

It will be dominantly for vacations or shorter overnight stays, since day use will be limited by the low density population around it.

Visitor days are estimated at 819,000 by the 5th year of operation and 1,880,438 by the 15th year. This volume is related primarily to planned camping capacity in the park and the park vicinity services expected to develop, with encouragement by the federal and local governments. (Table 3, page 6) Day use will raise the total to 1,219,000 visitor days in the 5th year and 2,555,000 by the 15th year.

Visitor expenditures are estimated at \$3.5 million in the 5th year and \$11.2 million in the 15th year in the park vicinity (Table 4, page 14). Visitor expenditures enroute to and from the park within the two counties are estimated at \$444,000 in the 5th year and \$1.4 million in the 15th year (Table 7, page 22).

Expenditures per visitor per day are estimated at \$2.91 in the 5th year and \$4.40 in the 15th year (Table 4, page 14). These do not include lodging for campers since national park policy does not make a charge for this apart from entrance fees. They also exclude entrance fees. Expenditure rates vary from \$1.01 per day visitor to \$17.15 per resort visitor in the 15th year, an indication of the wide range of visitors attracted (Table 4, page 14).

Park agency expenditures for capital development of the park are planned at \$1.5 million annually during the first five years of the park, and for operating expenditures \$515,000 annually, including \$344,000 for wages and salaries. (Table 7, page 22).

Employment provided by park agency and visitor expenditures is estimated at 216 full-time jobs in the 5th year and 388 in the 15th year, counting direct employment only (page 23). Wages and salaries will total \$1.3 million in the 5th year and \$2.3 million in the 15th year. Most of this will be spent locally (Table 9, page 25).

The park will withdraw from the tax rolls of the two counties \$1,048,633 estimated assessed values in the first years, about a third of which will be timber lands and timber stands (Table 11, page 30).

By the 5th year these withdrawn values would, in the absence of a park, probably drop to \$929,000 and by the 15th year to \$715,000 due to logging (Table 13, page 33).

The park would add estimated assessed values of \$3.6 million by the 5th year and \$7.9 million by the 15th year (Table 12, page 31).

The net increase in assessed values due to the park is estimated at \$1.5 million, or 71 percent, by the 5th year, and \$6.3 million, or 376 percent, by the 15th year (Table 13, page 33).

New tax revenues possible from the park's influence are estimated at \$177,052 in the 5th year and \$721,077 by the 15th year, including property taxes, sales taxes, and occupancy taxes (Table 14, page 34).

Between the first and the fifth years of the park, and perhaps earlier, assessed values are expected to rise in the park vicinity which will tend to offset the tax roll losses first experienced, due to public interest, purchasing, exchanges, and speculation. A program of reappraisal and reassessment in this area initiated early enough by the local governments can probably increase the tax revenues to offset the early withdrawal of lands.

The above findings are based on a park of planned location, dimensions, and facilities, and on assumptions stated in the text, and are subject to variation as these are amended.

Prospective Attendance and its Characteristics

The principal attendance of the proposed park will be from visitors who stay overnight in the park or its vicinity. There will be some day use by persons who do not remain overnight. In early years of operation, before overnight facilities of various types are developed in the park and vicinity, day use will be relatively high, but in the long run the vacationer should predominate.

Part of the influence favoring the vacationer patronage is the nature of the national park. It will be viewed by prospective visitors, especially from other states to the east, as a principal destination. It will be better known to them than the state parks and they will learn of its facilities for overnight accommodations through nationally distributed literature and other media.

Another influence is the location of the proposed park. From major points of origin, San Francisco and Portland, it will be over 300 miles. Persons driving this distance will require overnight stay somewhere in the vicinity, and they will try to plan accordingly. (see Table 1).

People starting from centers or areas less distant, such as southern Humboldt, Mendocino, Trinity, Shasta, and southern Oregon counties, are less likely to stay overnight in the park vicinity. Many of these groups will have visited other redwood parks. They will contribute to day use. However, day use will not be of the high volume at state parks because of the much higher fee at national

Table 1 DISTANCE AND DRIVING TIME
FROM MAJOR POINTS OF ORIGIN TO PROJECT AREA

Route	Origin and points enroute	Distance (miles)		Average driving time ^{a/} (hours & minutes)		Hour of arrivals & departures ^{b/}
		Number	Cumu-lative	Number	Cumu-lative	
U.S. 101	<u>San Francisco</u>	0	-	0:00	-	Lv. 9:00 a.m.
	Ukiah	113	113	2:30	2:30	Arr. 11:30 a.m.
	Garberville	105	220	2:30	5:00	Lv. 3:15 p.m.
	Eureka	74	294	1:30	6:30	Arr. 5:08 p.m.
	Orick	44	338	0:45	7:15	Lv. 6:04 p.m.
	Project	3	341	0:10	7:25	Arr. 6:14 p.m.
U.S. 299 and U.S. 101	<u>Redding</u>	0	-	0:00	-	Lv. 9:00 a.m.
	Weaverville	47	47	1:30	1:30	Arr. 10:30 a.m.
	Willow Creek	34	101	1:30	3:00	Lv. 1:00 p.m.
	Arcata	41	142	1:00	4:00	Arr. 2:00 p.m.
	Project	34	176	0:40	4:40	Arr. 2:40 p.m.
U. S. 199	<u>Portland</u>	0	-	0:00	-	Lv. 9:00 a.m.
	Eugene	114	114	3:00	3:00	Lv. 1:00 p.m.
	Grants Pass	146	260	3:00	6:00	Lv. 4:45 p.m.
	Crescent City	86	346	2:00	8:00	Arr. 6:45 p.m.
	Klamath	21	367	0:30	8:30	Arr. 7:15 p.m.
	Project	3	370	0:10	8:40	Arr. 7:25 p.m.
U.S. 101	<u>Portland</u>	0	-	0:00	-	Lv. 9:00 a.m.
	Otis	83	83	2:00	2:00	Arr. 11:00 a.m.
	Coos Bay	130	213	3:40	5:40	Lv. 4:05 p.m.
	Crescent City	135	348	3:50	9:30	Lv. 8:52 p.m.
	Klamath	21	369	0:30	10:00	Arr. 8:33 p.m.
	Project	3	372	0:10	10:10	Arr. 9:43 p.m.

a. California State Automobile Association publications, 1963.

b. Represents typical party and allows for average stops which increase the average travel time to 1.25 times the driving time except where further adjustments are necessary.

Table 2.

DISTANCE AND DRIVING TIME
AND DEPARTURE OR ARRIVAL TIMES
FROM PROJECT AREA TO MAJOR POINTS

Route and Direction	Origin and Points Enroute	Distance (miles) ^{a/}		Average driving time ^{a/} (hours & minutes)		Departure or Arrival Time of Typical Party
		Number	Cumulative	Number	Cumulative	
U.S.101 North to South	Klamath	0	-	0:00	-	Lv. 2:00 p.m.
	Orick	20	20	0:30	0:30	2:30 p.m.
	Eureka	44	64	0:45	1:15	3:15 p.m.
	Garberville	73	137	1:30	2:45	4:45 p.m.
	County Line	10	147	0:10	2:55	4:55 p.m.
	Ukiah	84	231	2:20	5:15	7:15 p.m.
U.S.101 and 299 South, then East	Klamath	0	-	0:00	-	Lv. 2:00 p.m.
	Orick	20	20	0:30	0:30	2:30 p.m.
	Arcata	34	54	0:45	1:15	3:15 p.m.
	Willow Creek	41	95	1:00	2:15	4:15 p.m.
	County Line	5	100	0:10	2:25	4:25 p.m.
	Weaverville	49	149	1:20	3:45	5:45 p.m.
U.S.101 and 199 North, then Northeast	Orick	0	-	0:00	-	Lv. 2:00 p.m.
	Klamath	20	20	0:30	0:30	2:30 p.m.
	Crescent City	21	41	0:30	1:00	3:00 p.m.
	Oregon Border	24	65	0:30	1:30	3:30 p.m.
	Grants Pass	62	127	0:56	2:26	4:26 p.m.
U.S.101 North, then Northwest	Orick	0	-	0:00	-	Lv. 2:00 p.m.
	Klamath	20	20	0:30	0:30	2:30 p.m.
	Crescent City	21	41	0:30	1:00	3:00 p.m.
	Oregon Border	20	61	0:30	1:30	3:30 p.m.
	Coos Bay	108	169	3:20	4:50	6:50 p.m.

^{a/} Based principally on information in California State Automobile Association publications, 1963.

parks, probably a \$2 minimum compared with 50 cents at state parks, and at the latter there is frequently no charge for brief visiting or sightseeing. Another source of day use is the local population. There is a tendency for residents to use state parks for one-day trips, picnicking, and other activities. However, this source should not be a heavy contributor to day use because the surrounding population is low and of thin density, as well as the fee deterrent.

The major sources of visitors should be the large centers of California population, particularly the San Francisco Bay counties and southern California counties, the Pacific Northwest states, Canada, and other states to the east. This is the experience of major state parks in the redwoods in the past decade. The difference is likely to be a larger representation from states outside California particularly over a period of years as the national park becomes known.

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The composition of the population groups visiting the park will also reflect the factors discussed above. There will be a varied composition of families typical of those found at western national parks, especially Yosemite. Families of different size and income will want a choice of accommodations. The large family, also the most numerous, tends to prefer camping or trailer facilities, and in many cases their availability will be a condition of making the trip. The smaller family, the couple, individuals, and those of comparatively high income, tend to favor the motel, hotel, or resort type of facility.

Four major groups are thus distinguishable: campers, trailerites, motel-resort, and day visitors. A fifth group, seasonal residents, is not included here as a major contributor of park attendance although their number will increase as a result of the national park. They will be a major contributor to recreation use and expenditures in the park vicinity, but their actual park attendance can be considered as part of the day-visitor group. In later years of the park, however, a fifth group probably should be distinguished: those of higher income who will want the luxury type of accommodation provided in some of the national parks. This group is due to grow larger over the years because of rising personal income in the United States. Projections of visitor volume in the 15th year of the park accordingly recognize this as a separate group in the category "Resorts."

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Projections of visitor volume are presented here in Table 3 for the park's fifth year of operation and for its fifteenth year. The estimates for the fifth year are primarily related to the proposed capacity of the park for camping and, secondarily, for picnicking and day use. Because of the backlog of demand in the North Coast for camping facilities it is expected that use will quickly respond to the supply provided. The policy in national parks of not charging separately (from the entrance fee) for camping will accelerate the demand and there will be a tendency for this park to fill first ahead of other parks and private facilities with a daily fee.

Table 3. Projections of Visitor Volume in 5th and 15th Years of Park Operation a/ (overnight use only)

Visitor group	No. units	Aver. party	Days in season	Possible visitor days	Occ- upancy rate	Annual visitor days
<u>5th year</u> Total	1,500					819,000
Campgrounds	500	4.5	120	270,000	95	256,500
Trailer parks	500	4.5	200	450,000	75	337,500
Motels	500	3.0	200	300,000	75	225,000
<u>15th year</u> Total	3,000					1,880,438
Campgrounds	750	4.5	150	506,250	95	480,938
Trailer parks	750	4.5	200	675,000	90	607,500
Motels	1,200	3.5	200	840,000	80	672,000
Resorts	300	2.5	200	150,000	80	120,000

a/ For the derivation and the assumptions on which the above figures are predicated, see text.

There is also at this time a shortage of camping which is greater than in the North Coast as a whole: the vicinity of the proposed park has a total of 642 trailer park units, 383 motel units, and 100 camping units. In the North Coast generally, excluding urban centers, the ratio of camping to trailer park units is 1:1 and to motel units also 1:1.

Campground use in the 5th year is estimated at 256,500 visitor days. This is based on the proposed capacity of 500 units inside the park, an average party of 4.5 persons, 120 days per year active use, and an occupancy rate of 95 percent. The size of party among campers has been increasing in the past decade and in several California parks has passed 4.0. It therefore appears probable that by the 5th year of operation the average party will approximate 4.5. The current season of active camping is about 85 days in the North Coast, but this too is lengthening, as spring and fall camping possibilities become better known, highway access improves and stimulates weekend trips, and the increasing use of trailers and similar equipment makes camping more feasible in changing weather. By the 5th year of operation, the season of active camping should lengthen to at least 120 days.

The excess of demand over supply will require private facilities. This private supply, outside the park, is represented herein under "trailer parks." This is likely to be an establishment which offers alternative accommodations, but since its primary operation will be as a trailer facility it is so classified herein, consistent with the method of the U.S. Standard Industrial Classification. In current

years the major trailer park supply is at the northern end of the proposed park, in the Klamath area, whereas the principal camping and trailer demand by park visitors will be at the southern end, in what may be generally considered the Orick area. To some extent the Klamath area will substitute in the early years. The estimates herein, however, for the 5th year of operation, assume that the park will generate its own demand for "trailer park" use, most of it in the southern area.

The estimate of trailer park use in the 5th year is 337,500 visitor days. This is primarily based on the experience of the past decade in the North Coast which has resulted, in nonurban areas, in approximately equal development of camping, trailer, and motel capacity. It is therefore estimated that 500 units will be supported, with an average party of 4.5 persons, 200 days active use, and an occupancy rate of 75 percent. The seasons should be longer than for tent camping and are calculated at 200 days representing 100 days of summer intensive use on a par with the campgrounds and the remainder of the year, for purposes of computation set at 100 days, with a substantially lower occupancy rate than in summer, resulting in an annual average of 75 percent occupancy. Some establishments will, of course, have higher occupancy rates due to location and quality of operation, while some will have lower occupancy. The latter trailer parks, however, may have other occupancy not attributable to the national park but to anglers and other patronage. The only use which is included in Table 3 is that attributable to the park.

The estimate of motel use in the 5th year of park operation is 225,000 visitor days. This is based principally on the ratio of motel development to trailer park and campground capacities in the North Coast noted above, and is accordingly calculated at 500 units. The estimate also reflects a smaller average party than campers or trailerites, 3.0 persons, which still is higher than the current average motel party in the North Coast, allowing for continuation of the trend increasing the average size of party as well as the rising personal income in the United States which enables and influences a choice of luxury accommodations. The season is calculated at 200 days on the same basis as the trailer park patronage, and an average occupancy rate of 75 percent. The same observations made with regard to trailer parks apply to motels: a period of intensive summer use and a period making up the balance of the year which, for purposes of calculation, is compressed into 100 days. It does not include other patronage of the motels attributable to attractions other than the national park.

The estimate of day visitors in the 5th year is 400,000. The basis of this estimate has been selected, for reasons discussed earlier, as the probable picnicking capacity of the park, which is assumed to be one-half the camping capacity, or 250 units. The estimate reflects an average party of 4.0 persons, a turnover of 2.0 per day, and 200 days of active use annually. It should be noted that this estimate is subject to substantial revision in the event

of change in entrance policies and fees of the national parks.

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Projections of visitor volume for the 15th year of park operation, also presented in Table 3, are based principally on changes to be expected during the decade between the 5th and 15th year: The proposed camping capacity will be increased from 500 to 750 units. An increase in the number of days of active camping use has been provided to raise it from 120 to 150 days annually, to allow for continuation of the factors noted above, namely greater acquaintance with spring and fall opportunities in the North Coast, and increasing use of trailers. This is considered a conservative increase and it should be noted that the summer camping season is still tied to the school vacation. A major change in the latter, proposed with increasing frequency in California, could lengthen the camping season in itself. The present projection, however, assumes that this will not occur.

The estimate of trailer park use is based on a continuation of the ratio between camping and trailer park capacity, 1:1, in the North Coast in recent years, and allowance for greater use of trailer parks or trailers, a continuing trend, has been provided by raising the occupancy rate from 75 to 90 percent annual average. This also appears realistic for another reason: by the 15th year the private trailer parks will have adapted their location and services to the national park's clientele, made new investments and improvements, and benefited from the increasing volume of visitors and lengthening seasons of use.

The estimate of motel use in the 15th year is 672,000 visitor days, and an additional 120,000 visitor days is projected for the group desiring luxury accommodations, shown in the table under "Resorts." This estimate represents a major increase from the 5th year. It is based principally on the experience of areas outside the North Coast where visitation has reached the volume expected in the 15th year. The capacity of motels and resorts in relation to campgrounds and trailer parks tends to rise in areas of high volume visitation, no doubt because of the inducement to private enterprise to invest in the more costly year-round accommodations and other facilities.

Day use in the 15th year is estimated at 675,000 visitor days. This is based on assumed provision of picnic units to the extent of 50 percent of the camping units, or 375 picnic units. It also includes an estimated average party of 4.5 persons; a turnover rate of 2.0 per day; 200 days active use per year.

In summary, the total attendance in the 5th year is projected as 1,219,000 visitor days, including 819,000 for overnight use and 400,000 for day use; and total attendance in the 15th year is projected as 2,555,438 visitor days, including 1,880,438 for overnight use and 675,000 for day use.

Visitor Expenditures in Park Vicinity

Visitors will make expenditures for the goods and services they require from the time of their arrival at the park until their departure. They will also make expenditures en route before their arrival at the park and after their departure, and some of these expenditures will be made in Del Norte and Humboldt Counties. These two categories of expenditure are estimated separately in the present study.

The expenditures made in the park vicinity will cover principally an area within ten miles of the exterior boundaries of the park. They will tend to concentrate in locations most accessible from the park entrances or exits, since most of the expenditures will be for convenience goods, although some will be made further away during short trips and sightseeing explorations by the visitors.

Table 4 presents estimates of the visitors' potential spending in the fifth year of park operation and also in the fifteenth year of park operation. The spending represents "potential" in the sense that the supply is necessary in order for the spending to occur. The estimates are based on actual records of concessioner receipts in several national parks, on expenditure surveys in 1959 throughout California by the State Public Outdoor Recreation Plan Committee, and on expenditure surveys made in 1962 at various state parks by the State Division of Beaches and Parks. Prices have been adjusted to 1960-63 levels, especially to allow for recent increases in lodging.

The expenditure per visitor day varies for each group: for the day visitor it is \$0.98, for the camper it is \$2.00, for the

persons staying overnight outside the park it is \$2.55 for campers and trailerites; \$7.95 for those staying at motels and similar places; with the result that the overall average is \$2.91.

The estimates are conservative in the respect that in some areas and parks they are exceeded. For example, in areas where there are a great variety of inducements and stimulations to the visitor, spending is higher, such as at certain beaches which are next to amusement parks, or parks close to urban centers. It is assumed that the national park will have moderate attractions in its vicinity and adequate stores and restaurants but will not resemble the above type of community situations.

By the fifteenth year certain changes may be expected. The higher volume of visitation will have attracted increased investment in stores and services by private capital, and the rising incomes of the visitors will result in demand for a luxury type of accommodation, represented in Table 4 as "Resorts," and for a somewhat increased level of spending by motel patrons.

The types of establishments which are likely to develop as a result of the visitor spending potential in the fifth and fifteenth years are presented in Table 5. Some of these will, of course, already exist in the first year of park operation, and may expand or otherwise adapt to the new patronage.

Table 4. Visitor Expenditures in 5th and 15th Years of Park Operation, projected (in dollars) in Park Vicinity

Visitor group 5th year	Visitor days	Expenditure per v. day	Total Expenditures
Total	1,219,000	2.91 <u>a/</u>	3,554,100
Campgrounds	257,000	2.00 <u>b/</u>	514,000
Trailer parks	337,000	2.55	859,350
Motels	225,000	7.95	1,788,750
Day use	400,000	.98	392,000
Visitor group 15th year <u>c/</u>			
Total	2,535,000	4.40 <u>a/</u>	11,233,420
Campgrounds	481,000	2.06 <u>b/</u>	990,860
Trailer parks	607,000	2.71	1,644,970
Motels	672,000	8.72	5,859,840
Resorts	120,000	17.15	2,058,000
Day use	675,000	1.01	681,750

a/ Computed by dividing total expenditures by total visitor days. The figure is too rounded to be exact.

b/ Excludes any expenditure for lodging since campgrounds will be located inside national park and the existing policy is not to charge separately for camping.

c/ No allowance has been made for price changes between 5th year and 15th year. Actually the 5th year figures reflect prices prevailing in 1960-1963.

Table 5. Visitor Expenditures per visitor day in 5th and 15th years of Park Operation, in Park Vicinity, by type of establishment

Type of establishment	Expenditures per day by persons in following group				
	Camp-grounds	Trail-er parks	Motels	Day use	Resorts
<u>5th year:</u>					
Retail and services	2.00	2.55	7.95	.98	
Retail	1.81	1.81	4.24	.88	
Food stores	.90	.90	.45	.15	
Eating & drinking places	.20	.20	2.33	.18	
Gasoline service stations	.28	.28	.28	.33	
General merch. stores	.30	.30	.15	.02	
Miscellaneous stores	.13	.13	1.03	.20	
Services	.19	.74	3.71	.10	
Auto repair, garages	.02	.02	.02	.02	
Lodging	a/	.55	3.50	-	
Amusements	.15	.15	.17	.08	
Personal services	.02	.02	.02	-	
<u>15th Year:</u>					
Retail and services	2.06	2.71	8.22	1.01	17.15
Retail	1.86	1.86	4.49	.90	10.94
Food stores	.90	.90	.45	.15	.07
Eating & drinking places	.25	.25	2.33	.18	8.53
Gasoline service stations	.28	.28	.28	.35	.28
General merch. stores	.30	.30	.15	.02	.05
Miscellaneous stores	.13	.13	1.28	.20	2.01
Services	.20	.85	4.23	.11	6.21
Auto repair, garages	.02	.02	.03	.03	.03
Lodging	a/	.65	4.00	-	6.00
Amusements	.15	.15	.17	.08	.16
Personal services	.03	.03	.03	-	.02

a/ No separate charge is made for camping inside national park. Entrance fee is not included in above table.

Visitor Expenditures En Route

The expenditures made by visitors in Del Norte and Humboldt Counties before they arrive at the park and later when they make their departure from the park are additional to the expenditures made during their actual stay in the park or its immediate vicinity. It is desired in the present study to estimate these en route expenditures and to limit the amount to that reasonably due to the presence of the national park.

For this purpose it is assumed that the average length of stay in the park vicinity will be four days in the fifth year of park operation and that for each four days there will be one day spent en route in the two counties, representing one-half day in arrival and one-half day in departure. It is further assumed that some of the visitors to the national park will have made the trip with the park as a primary destination while other visitors will have had other destinations as well as the park in mind. For facilitating calculation, the groups are estimated to be equal in number. This provides total en route expenditures in the fifth year of \$444,262. This total is allocated 80 percent to Humboldt County and 20 percent to Del Norte County on the basis of the forecast travel volumes from the south and the north.

It is of interest to note the possibility that the national park may attract a much higher proportion of the visitors than is credited above. This could occur as the result of what may be termed, at least tentatively, the phenomenon of "cumulative attraction".

This is observable in other areas. The addition of the national park may induce visitors who otherwise would not make the trip to the North Coast to decide in its favor.

It should also be noted that the en route expenditures are potentially much higher than estimated above, since visitors may decide to lengthen their stopover en route to or from the park at points within the two counties and yet outside the park vicinity.

CAPITAL OUTLAYS

Land. The amounts to be expended for land will be estimated by other members of the project study group. When such estimates are available their probable effect on the county economies can be assessed.^{a/} Meanwhile, it may be anticipated that the principal types of impact will include the (a) conversion from present uses or trends to the new, consolidated park use, (b) the withdrawal of part of the acquired lands from their taxable status, (c) the change in value or prospectus of adjacent lands, for example their functioning in relation to the new park, (d) the resultant private capital investment on adjacent lands enhancing the value of the land itself.

Improvements. The amounts to be expended to expand the capacity and use of the existing park are estimated at \$7.5 million during the first five years, or an average of \$1.5 million each year. The distribution and effect on the county economies of these outlays may be estimated on the basis of past experience in park developments in the redwood region, modified by differences intended in federal operation. Capital outlays in the existing park excluding land costs from July 1, 1945 to June 30, 1958, totaled \$193,454, shown in accompanying table. Capital outlays in more recently acquired and developed parks, MacKerricher and Grizzly Creek, indicate more current cost distribution. Median percentages would be Utilities 24%, Site Development 25%, Buildings 40%,

^{a/} Lands within existing park in 1959 totaled 9,568 acres valued by the State at \$2,274,954, or average per acre of \$237. State of California, Department of Natural Resources, Division of Beaches and Parks, Property Ownership Report, Jan. 1, 1959, page 4.

Table 6. CAPITAL OUTLAYS OTHER THAN LAND

Existing Park 7-1-45 to 6-30-58 (Park A).			
A. Utilities	<u>57,233</u>		
Water system	52,217		
Sewage	3,389		
Electric	907		
Telephone	720		
B. Site Development	<u>36,188</u>		
Roads and parking	26,200		
Service area and road	8,584		
Landscaping & grading	1,404		
C. Buildings	<u>71,644</u>		
Residence and garage	43,943		
Sanitary facilities	22,834		
Office and contact station	4,867		
D. Recreation facilities	<u>27,471</u>		
Camp units (100)	20,649		
Picnic units (25)	1,032		
Outdoor theater	885		
Trails and footbridges	4,905		
E. Fire protection, etc.	<u>918</u>		
Total	193,454		
		Other parks in area	
		Park A.	Park B.
			Park C.
Percentage distribution	100.0	100.0	100.0
A. Utilities	29.4	23.6	24.0
B. Site development	19.1	26.8	25.2
C. Buildings	37.0	38.4	41.4
D. Recreation facilities	14.0	11.2	9.4
E. Fire protection, etc.	0.5	nr	nr

The dollar amounts expended were reported in Summary of Capital Outlay for Construction for Period July 1, 1945 to June 30, 1958, page 12, by State of California Department of Natural Resources, Division of Beaches and Parks. These amounts reflect lower costs of earlier years; the park was initially acquired in 1923. The distribution in parks B and C, on a percentage basis, are more indicative of later costs; MacKerricher, acquired 1949, and Grizzly Creek 1943.

recreation facilities 10 percent and fire protection and other, 1 percent.^{a/}

Capital outlays on the basis of the above distribution would be for the following purposes each year during the first five years of park development or expansion:

Utilities	\$360,000
Site development	375,000
Buildings	600,000
Recreation facilities	150,000
Fire protection etc.	15,000
Total	\$ 1,500,000

The probable distribution of these annual outlays would be about 30 percent to labor and 70 percent to materials. Materials would include such items as lumber, hardware, plumbing equipment, cement, asphalt, electrical equipment, paints, etc. Both Del Norte and Humboldt Counties would receive the share to labor, or \$450,000, while the materials expenditures would largely be made in Humboldt County in wholesale establishments.

Operating Expenditures

Operating expenditures, as distinguished from capital outlays described above, are estimated at \$516,000 annually. This is based principally on the anticipated park staff wages and salaries of \$344,000. The remainder, \$172,000, is estimated on the basis of

^{a/} The capital outlay categories used here were devised in a special study for the State Public Outdoor Recreation Plan Committee by Jack N. Kositsky, Consulting Engineer and Architect, Berkeley, in 1959, and were based principally on interpretation of the cost records of the State Division of Beaches and Parks and the cost analyses of Fred L. Hector, Consulting Landscape Architect, Los Gatos, California.

state park experience in the North Coast in recent years, during which wages and salaries account for two-thirds and nonlabor items one-third. The latter include such typical items as maintenance of structures, roads, and parking areas, equipment operation, rentals, supplies, and office expenses. An estimated 80 percent will go to Humboldt and 20 percent to Del Norte.

Table 7 presents a summary of the three different sources of outside funds--by visitors in the park vicinity and enroute, by the park management for operating needs, and by the Congress and the federal agency for capital outlays to develop the park.

The combined expenditures from these three sources provide an aggregate picture of the impact on the area during the period of development of the park. They add to approximately \$6,000,000 annually during the first five years of development, actually reaching that level about the fifth year of park operation. By the 15th year of park operation, capital outlays have of course dropped off, park operating expenditures are necessarily somewhat higher, and visitor expenditures have risen to a level about three times that of the 5th year. Total expenditures in the two counties by the 15th year will exceed \$14 million dollars according to these estimates and projections in Table 7.

How much of this large outlay will enter local channels will depend largely on the availability of materials and equipment in the two counties, that is, in wholesaler and other supply establishments. It can be assumed that the wage and salary portion of the outlay will

Table 7. Summary of Annual Average Expenditures by
Visitors and by Park Administration in
5th and 15th Years of Park Operation

Item	Total	Humboldt	Del Norte
<u>5th year</u>			
Visitor expenditures	3,998,362	3,198,690	799,672
In park vicinity	3,554,100	2,843,280	710,820
Enroute	444,262	355,410	88,852
Park Operating expenditures	515,790	412,632	103,158
Wages and salaries	343,790	275,032	68,758
Other	172,000	137,600	34,400
Park Capital outlays	1,500,000	1,200,000	300,000
Wages and salaries	450,000	360,000	90,000
Materials	1,050,000	840,000	210,000
<u>15th year</u>			
Visitor expenditures	12,639,847	10,111,877	2,527,970
In park vicinity	11,235,420	8,988,336	2,247,084
Enroute	1,404,427	1,123,541	280,886
Park Operating expenditures ^{a/}	773,685	618,948	154,737
Wages and salaries	515,685	412,548	103,137
Other	258,000	206,400	51,600
Park Capital outlays ^{b/}	750,000	600,000	150,000
Wages and salaries	225,000	180,000	45,000
Materials	525,000	420,000	105,000

a/ Estimated at 1.5 times the 5th year.

b/ Estimated at 0.5 times the 5th year.

largely be spent locally, first in payments to employees of the park agency and employees of retail and service establishments, and in institutional and governmental agencies.

Table 8 estimates the flow of money received by retail and service establishments from visitors. The largest portion goes to wholesalers and other supplies, 56.3 percent. The next share is received by employees, 12.6 percent. Proprietors retain about 8.5 percent as their net income. The remainder, about one-fourth, is divided among many different local enterprises including local government agencies.

Table 9 and accompanying chart show the probable distribution by park staff of their income. The only portion which definitely is known to go outside the area is the income tax payments; the rest includes shelter or housing, utilities, medical care, and retail and service spending.

The employment produced by the park can be estimated from the amount of the payrolls, which are as follows:

	5th year	15th year
From capital outlays (Table 7)	\$ 450,000	\$ 225,000
From operating exps. (Table 7)	343,790	515,685
From retail and service establishment operations (Table 8)	<u>503,748</u>	<u>1,587,600</u>
Total..	1,297,538	2,328,285

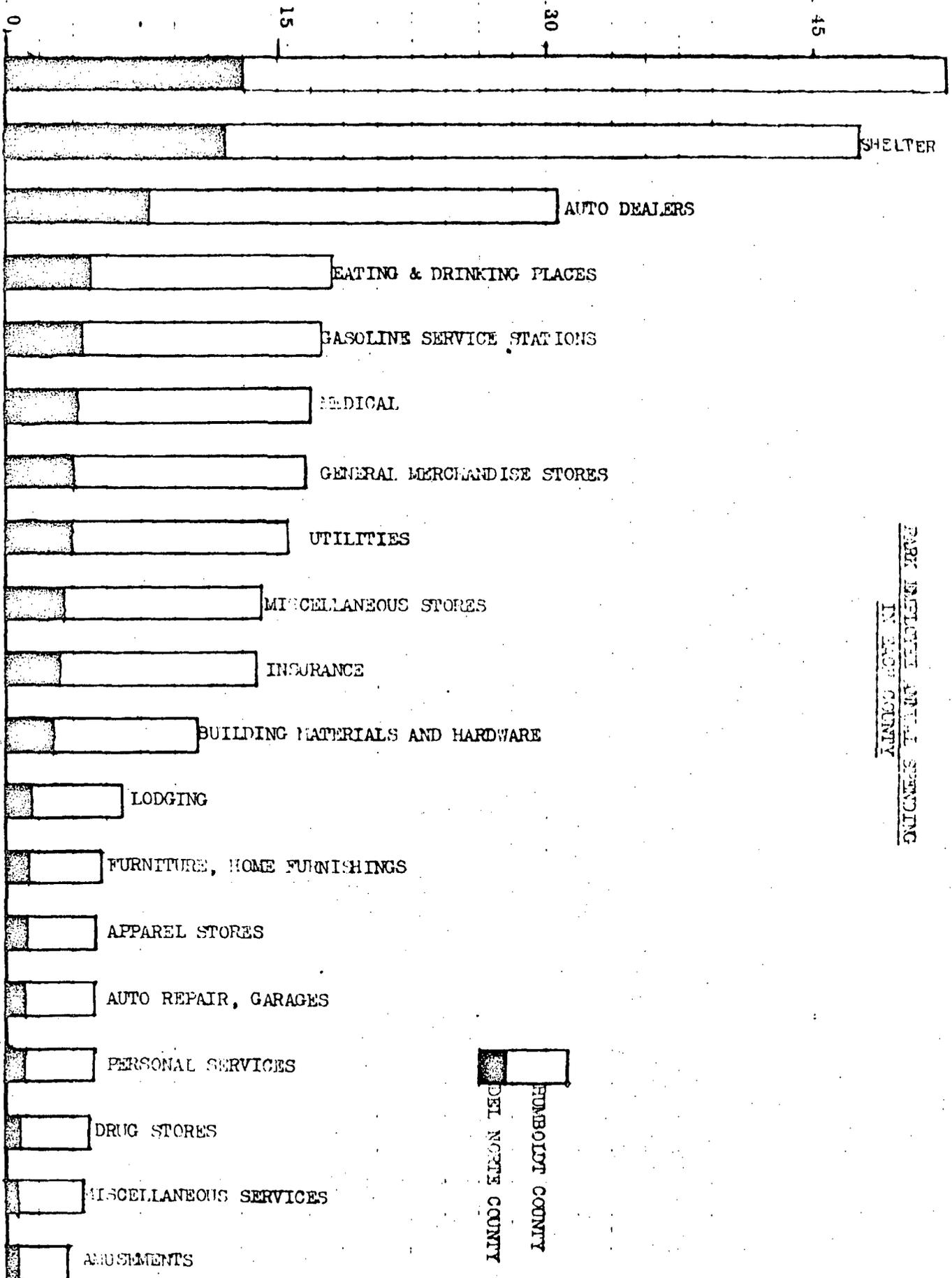
At an average annual income of \$6,000 there will be the equivalent of 213 full-time employees in the 5th year and 388 in the 15th year. This is direct employment only, not including wholesale and other sources.

Table 8. Redistribution by Retail and Service Establishments of Receipts from Park Visitors, in 5th Year and 15th Year of Park Operation ^{a/}

Item	Percent	5th Year (in dollars)	15th Year (in dollars)
Total	100.00	3,998,000	12,600,000
Purchases from wholesalers	56.3	2,250,874	7,093,800
Payroll	12.6	503,748	1,587,600
Supplies used	1.3	51,974	183,800
Advertising	1.6	63,968	201,600
Repairs, maintenance	1.5	59,970	189,000
Laundry	0.8	31,984	100,800
Utilities	2.6	103,948	327,600
Transportation	0.1	3,998	12,600
Administration, legal	0.2	7,996	25,200
Other operating expenses	0.9	35,982	113,400
Rent	2.0	79,960	252,000
Property taxes, licenses	1.4	55,972	176,400
Insurance	0.7	27,986	88,200
Interest	2.8	111,944	352,800
Depreciation	5.2	207,896	655,200
Sales taxes	1.5	59,970	189,000
Net income to proprietor	8.5	339,830	1,071,000

^{a/} Based on accounting reports of proprietor operations in each of the major retail and service industries in California in the period 1960-1963.

\$1,000.



PER CAPITA RETAIL SPENDING IN EACH COUNTY

HUMBOLDT COUNTY
DEL NORTE COUNTY

Assessed Values and Tax Revenues

The proposed park will change the physical values in the area inside and adjacent to the park which form the basis for the property tax by local governments of county, city, and district. These physical values include the land, the improvements such as structures, and equipment or movable property. In Tables 10 through 14 the changes in values are estimated. In Table 14 the tax revenues attributable to the park are calculated and added to the projected sales taxes and occupancy taxes which can legally be realized by local governments as a result of the park.

Several assumptions prove necessary in order to produce these calculations. For example, the assessed values are based on current county assessment rolls. They are the product of judgment by the appraisers and they are also related to market values. With major changes in the market as a result of changed demand or other factors, market values must change and eventually assessed values. A further influence on assessed values is the existing state practice under law of exempting from assessment the timber on land logged seventy percent or more. This requires that assessed values be trimmed downward over a period of years where cutting is in progress. In the estimates herein the reductions from this source are deliberately moderated in order to provide conservative data for comparison. Another major assumption implicit throughout this analysis is that the basic values, as distinguished from the assessed values, of the North Coast lands,

Table 10. Assessed Valuations of Areas in Taxable Status Inside Proposed Park Acquisition Boundaries a/

County and School District	Assessed Valuations	Sections (sq.mi.) number	Assessed Value per Section	Sections to be acquired	Assessed Value of acquisition <u>c/</u>
<u>Humboldt County</u>					
Orick, excl. town	980,800	72	\$13,622	16	217,952
Big Lagoon, all	3,627,000	91	39,857	14	557,998
Klamath-Trinity 157-03 only <u>b/</u>	7,493,540	504	14,868	7	104,076
Total	12,101,340			37	880,026
<u>Del Norte County</u>					
Klamath	6,474,540	96	67,443	2 $\frac{1}{2}$	168,607
<u>Both counties</u>	18,575,880			39 $\frac{1}{2}$	1,048,633

a/ Does not include sections within existing state park.

Data for Humboldt County are for fiscal year 1963-64; data for Del Norte County are for 1962-63.

b/ Refers to tax code area; other tax code areas in the Klamath-Trinity School District are omitted as less relevant.

c/ Assuming that the average assessed value per section of the entire school district is characteristic of the acquired sections.

are in early stages since they are largely unknown, certainly to the population which will settle in California in the next few decades. In many ways these basic land values are unknown to the professional geologist, since the least exploration has been done in this region of California. That biological and historic values are undergoing revision is attested in the course of this study of the redwoods. The impending development of water resources in the North Coast area will have tremendous effects on land values. With these considerations in mind it is evident that the estimates and projections in these pages must be regarded as tentative, although it is believed that they are a guide to future potential, to be amended by subsequent findings.

Table 10 shows that the areas of land now in taxable status within the acquisition zone total approximately 39½ sections or square miles. The assessed values on county assessment rolls of these sections, based on the average value of sections in the particular tax district (which is a school district in these counties), total \$1,048,633.

Table 11 analyzes this total assessed valuation to allocate part of it to land, timber, and other values. This table indicates that the largest values involved on the tax rolls for the acquisition area lie outside the timber lands; the reason doubtless being the low assessment per acre of timber compared to other lands.^{a/}

Table 12 estimates the values which will be added to the county assessment rolls as a result of a park of the dimensions and visitation described in earlier chapters. By the 5th year of park operation these

^{a/} The timber operations also account for a substantial share of the assessed values outside the timber lands and timber volume.

Table 11. Assessed Valuations of Areas Inside Proposed Park Boundaries, by Type of Value, Current Years

	Total	Per acre
Total area 39.5 sections, or 25,280 acres		
Land, Timber Volume, and Improvements	\$1,048,633	41.50
Land only, 19,487 acres with standing timber, ~ \$4 per acre	77,948	4.00
Timber only, 19,487 acres Virgin redwood 10,805 acres ~ average of \$22 per acre (Humboldt County average)	237,710	22.00
Cutover 8,682 acres ~ arbitrary average 1/2 above or \$11 per acre ^{a/}	95,502	11.00
Other assessed values within the acquisition area including improvements on the above lands 5,793 acres	637,473	110.00

^{a/} Some of this acreage will have no assessed value for the timber, since land with timber logged more than 70 percent is assessed for the land only. However, some of the acreage is assumed to have standing timber logged less than 70 percent. This is estimated at 50 percent which is considered liberal, in order to offset possible under-estimation of the average of \$22 for the virgin redwood stands.

Table 12. Projections of Assessed Values attributable to Proposed Park, 5th and 15th years

Source	5th year	15th year
Capital outlays <u>a/</u>	150,000	75,000
Operations <u>b/</u>	113,474	170,211
Visitors' expenditures <u>b/</u>	860,000	2,709,000
Recreation-retirement residences <u>c/</u>	2,500,000	5,000,000
Land investment	<u>d/</u>	<u>d/</u>
Total	3,623,474	7,954,211

- a/ Assessed values represent 10 percent of projected outlays, after allowance for capital spending outside the two counties.
- b/ Assessed values represent 22 percent of projected expenditures. They are based on the property taxes to be paid by business establishments and other commercial receivers of income from visitor or agency spending.
- c/ Assessed values represent 25 percent of estimated market value of recreation residences. The market value is estimated at an average of \$10,000 including land and improvements; 1,000 new such residences by the 5th year and 2,000 by the 15th year; the number of residences based on ten percent of total visitor days divided by average party of four persons and again divided by two to allow for use of residence by average of two parties (families or other type) per year. The assessed values for residences are high compared to other factors largely because the full purchase of a large transaction is involved even though it is not paid for in full.
- d/ No estimate is included due to inadequate data at this time. This factor will include speculation as well as the influence of capital improvements by the park agency from the time of announcement of the park to the 5th year.

assessed values are estimated at \$3,523,474.

In Table 13 the assessed values to be withdrawn from the tax rolls by the park are projected to the 5th year of park operation to enable comparison with tax values added by the park by that year. On the assumption of continuing cut in timber and resulting exemption of certain timber volume from assessment, the tax rolls will gain \$1,498,491 in assessed values due to the park, or a 70 percent rise. The same process projected to the 15th year results in a gain in assessed values due to the park of \$6,283,051, or 376 percent increase.

Table 14 estimates the net gain in property taxes which will result from the above net gain in assessed values. It assumes continuation of the current approximate rate of \$8 per \$100 assessed valuation. (This is the combined levy by all local governments--county, city, school district, and other districts.) It shows a net gain in property taxes of \$119,872 by the 5th year and \$502,640 by the 15th year. Sales tax revenues are estimated and added into the table. An occupancy tax is also included, since this is authorized by the 1963 Legislature, Regular Session, Chapter 2111. The statute did not limit the rate but it is assumed here that 4% will be levied for uniformity with sales taxes. The total tax revenues to the two counties from property, sales, and occupancy taxes will be \$177,052 in the 5th year and \$721,077 in the 15th year, based on visitor volume, rate of spending, and agency outlays projected in earlier tables. Table 14 also allocates these tax receipts between Del Norte and Humboldt counties on the basis of expected patronage, and lands affected.

Table 13. Projections of Taxable Assessed Values With and Without Proposed Park, 5th Year and 15th Year

Type of alternative	Current period	5th year	15th year
A. Without a national park			
Area inside park boundaries (25,280 acres)	1,048,633	929,783 ^{a/}	715,000 ^{b/}
Area adjacent to proposed park (32,000 acres) ^{c/}	1,328,000	1,195,200	956,160
Total	2,376,633	2,124,983	1,671,160
B. With a national park			
Area inside park boundaries ^{d/}	-	-	-
Area adjacent to park ^{e/}	-	3,623,474	7,954,211
C. Difference (B minus A)			
Amount	-	1,498,491	6,283,051
Percent		70.5	375.9

- ^{a/} The reduction represents a drop in assessed value from \$22 to \$11 per acre of 10,805 acres of redwood due to logging.
- ^{b/} The reduction represents a drop in assessed value of 19,487 acres due to logging and exemption to assess land only at \$4 per acre.
- ^{c/} Current period represents average of \$41.50 per acre, 5th year a drop of 10 percent and 15th year 20 percent due to logging.
- ^{d/} No private facilities planned inside park.
- ^{e/} See Table 12 for source of figures.

Table 14. Projections of New Tax Revenues Attributable to Proposed Park, 5th and 15th years, by County

Type of tax	Total	Del Norte	Humboldt
<u>5th year</u>			
Property tax \$8 per \$100 Assessed value			
Assessed value ^{a/}	1,498,491	149,849	1,348,642
Tax revenues	119,872	11,387	107,885
Sales tax 4 1/2% taxable sales	18,268	8,351	14,917
Occupancy tax 34% lodging cost	38,912	7,782	31,130
Total revenues	177,052	23,120	153,932
<u>15th year</u>			
Property tax \$8 per \$100 assessed value			
Assessed value	6,283,051	628,305	5,654,746
Tax revenues	502,640	50,264	452,376
Sales tax 4 1/2% taxable sales	66,337	12,170	54,167
Occupancy tax 34% lodging cost	152,100	30,420	121,680
Total revenues	721,077	92,854	628,223

a/ Represents only the net increase in assessed values due to park. Actual assessed value and tax revenues therefrom are higher and are shown in Table 13. The divisions between counties represent 90 percent of the assessed value to Humboldt, and 60 percent of taxable sales and lodging receipts, since the latter are based on visitor travel flows through Del Norte and the assessed value represents amount of land.

It should be noted that part of the loss in assessed values within the acquisition area may be temporary rather than permanent if the existing timber operations are shifted to other areas within the two counties. In addition, even this temporary loss can be reduced or offset entirely by the counties by undertaking a review, in the period following announcement of park negotiations, of the assessed values in the area adjacent to the proposed park. Such review could bring assessed values up to date with market trends and increases in values resulting immediately from the public interest and higher appraisal of the area.

In the long run the proposed park appears to provide substantial net gains in assessed values and tax revenues in the counties and especially in the area adjacent to the park. The physical contours of the park and its location will aid the enhancement of the values of surrounding lands, that is, the existence of private lands along and overlooking a linear park. A federal policy of encouraging and stimulating private investment and development will further this enhancement of values and the consequent enriching of the local tax base.