

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES
Northern District

RECREATION USE SURVEY OF
EAST PARK RESERVOIR, COLUSA COUNTY
2000

Technical Information Report ND-03-2

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This report was prepared to summarize information collected under the North-of-the-Delta Offstream Storage Investigation to document recreation at reservoirs similar to the Sites and Newville Reservoir proposals under study in this investigation. This report has received only limited review; it is intended for internal use and should be considered preliminary and subject to revision.

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RESULTS

Recreation Use

Total recreation use at the Lodoga side of East Park Reservoir was estimated at 550,000 recreation hours ($\pm 130,000$) for the period it was open to use, April 14 to September 30, 2000. Based on three visual counts of recreationists during each survey day, camping was the major activity, followed by relaxing, boating, swimming/wading, beach use, sightseeing, walking, shore fishing, water skiing, boat fishing, picnicking, and several miscellaneous activities.

At the Stonyford side of East Park, total recreation use was estimated at 118,000 recreation hours ($\pm 30,000$) for the period April 1 to September 30. Observed recreation activities were very similar to the Lodoga side. Camping was the major activity, followed by just relaxing, boating, swimming/wading, beach use, sightseeing, picnicking, shore fishing, walking, water skiing, boat fishing, and several miscellaneous activities.

Combining these estimates, recreation use for the entire lake totaled about 668,000 recreation hours ($\pm 160,000$) in 2000 (Table 1).

Dividing this estimate by the calculated harmonic mean length-of-stay (11.65 hours) suggests about 57,000 recreation-days of use at East Park Reservoir in 2000. The harmonic mean was used to calculate recreation-days to correct for the higher probability of interviewing people on lengthy visits. It corrects for a statistical bias that otherwise occurs in roving surveys of this type (Lucas 1963). The harmonic mean was calculated from the interview data, using the reported length-of-stay for day-use visitors and the number of daylight hours (14-16.5) for the overnight visitors. This approach may somewhat over-estimate recreation-days because some overnight visitors are not present throughout the entire survey day (daylight hours), especially on Fridays when people are arriving for the weekend, and on Sundays when they leave for home.

Another way to approximate the number of recreation-days is to estimate annual recreation use using the maximum use count on each survey day as a proxy for the number of recreation-days on that date. This approach may provide a good estimate of recreation-days among overnight visitors, but probably under-estimates the number of recreation-days among day-use visitors because not all of them are present during any single use count (i.e. day-users turnover).

Table 1. Estimated Recreation-Hours at East Park Reservoir - 2000			
Recreation Area	Lodoga	Stonyford	Reservoir Totals
Recreation Activities	Recreation-Hours		
Camping	254,000	47,000	301,000
Just Relaxing	138,000	22,200	160,200
Boating	52,100	14,200	66,300
Swimming\Wading	37,900	10,300	48,200
Beach Use	27,300	10,200	37,500
Sightseeing	15,700	3,000	18,700
Walking For Pleasure	5,800	2,100	7,900
Shore Fishing	5,000	2,500	7,500
Miscellaneous*	5,800	1,500	7,300
Picknicking	2,100	2,900	5,000
Waterskiing	3,500	1,200	4,700
Boat Fishing	2,800	900	3,700
Estimated Recreation-Hours	550,000	118,000	668,000
* Miscellaneous includes people observed riding bicycles (3,200 hours), playing various Outdoor games (2,400 hours), attending events (900 hours), riding motorbikes or off-road vehicles (600 hours), or riding horses (200 hours).			

Expanding the maximum use count on each survey yields about 49,000 recreation-days. The mean of these two estimates (57,000 and 49,000) suggests that about 53,000 recreation-days is a reasonable estimate of use at East Park Reservoir in 2000.

The use counts reflected what recreationists were doing when they were observed and the approximate number of hours spent on each activity, but did not provide data on other activities that people pursued at other times during their stay. Interviews were used to provide this information.

In addition to the use counts, 372 interviews of recreationists were conducted at the Lodoga area and 121 interviews at the Stonyford area. These interviews provided more detailed information on activity participation and additional information on visitor characteristics, such as length of stay, visitor origin, and recreation equipment brought to the reservoir.