Recreation Model Results
for the
Truckee River Water Quality Settlement Agreement
Environmental Impact Statement

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Table of Contents

Introduction 1

Model Results 3

Model Calculations 15
- Present Conditions 17
- No Action Alternative 41
- Proposed Action - $12 Million Federal Acquisitions 65
- Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million) 89
- Cumulative Effects 113

Model Data 137

References 182

Introduction

- Recreation model results for the Truckee River Water Quality Settlement Agreement Environmental Impact Statement (WQSA EIS) are presented in this report.

- The recreation model that was developed for this report calculates the river visitation in response to the monthly mean flow levels for the Truckee River at Farad, California, and, the reservoir visitation in response to the end of the month reservoir storage levels at Donner Lake, Prosser Reservoir, Stampede Reservoir, and Boca Reservoir. The recreation model also calculates the economic impacts on the regional economy from river and reservoir visitation.

- A previous version of this recreation model was developed by MacDiarmid (1995). This model, however, has been expanded for this report to include river recreation survey data collected by Aukerman (1999) and updated to include additional reservoir recreation survey data collected by the California Department of Water Resources (1999). This model has also been updated to include more recent multipliers derived from a regional economic model developed by Darden (1998).

- Visitation response relationships for river flow levels were developed with river flow data from the U. S. Geological Survey (1999) and with the recreation survey data from Aukerman (1999). A time series of monthly mean flow values for the Truckee River at Farad, California, were analyzed to define higher minimum flow, more consistent flow, higher flow, and 1999 flow levels. Then with survey data, a predetermined number of visitors based on flow preferences and seasonal visitation were calculated to correspond to each of the flow levels. For given monthly mean flow levels, the relationships behave in such a way, that the model linearly interpolates between each flow level and the predetermined number of visitors at each flow level and arrives at a visitation response.

- Visitation response relationships for reservoir storage levels were developed in a different way and rely on an equation structure based on storage preferences and seasonal visitation. For given end of the month reservoir storage levels, the equation structure calculates a seasonal visitation percentage, which in turn adjusts the predetermined number of visitors for 1999 and arrives at a visitation response. This equation structure is described further in MacDiarmid (1995).

- The recreation model is calibrated for the 1999 calendar year in terms of monthly mean river flows, end of the month reservoir storage, and visitor numbers.

- Flows values for the Truckee River at Farad, California comply with the Floriston Rates (minimum instream flow requirements) as defined by the Nevada Division of Water Planning (1995). Releases from Lake Tahoe and Donner, Martis Creek, and Independence Lakes, and Prosser, Stampede, and Boca Reservoirs are regulated to support the flows at Farad and meet the Floriston Rates. Flow values in other

sections of the Truckee River are assumed to be correlated to the flows gauged at Farad. The Floriston Rates originated in 1915.

- The economic impacts on the regional economy from river and reservoir visitation are output-based estimates and 1999 calendar year values.

- The recreation model results are presented for the Present Conditions, No Action Alternative, Proposed Action - $12 Million Federal Acquisitions, Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million), and Cumulative Effects. Present Conditions represent the 1999 calendar year.

- The model results are supported with more detailed model calculations and model data in subsequent sections of this report.

Model Results

- Model results for Present Conditions, No Action Alternative, Proposed Action - $12 Million Federal Acquisitions, Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million), and Cumulative Effects are compared to each other.

- Model results follow in order and start with the Truckee River monthly mean flow levels and Truckee River visitation.

- The monthly mean flow level for Present Conditions is the Truckee River flow at Farad, California, and the flow levels for each of the other alternatives is the Truckee River flow below the confluence of the Little Truckee River near Boca Reservoir.

- The Truckee River visitation includes monthly fishing, fly fishing, kayaking, and rafting visitors and total expenditures. Fishing visitors are spin-lure-bait fishing.

- Next is the Donner Lake end of the month reservoir storage levels and Donner Lake visitation.

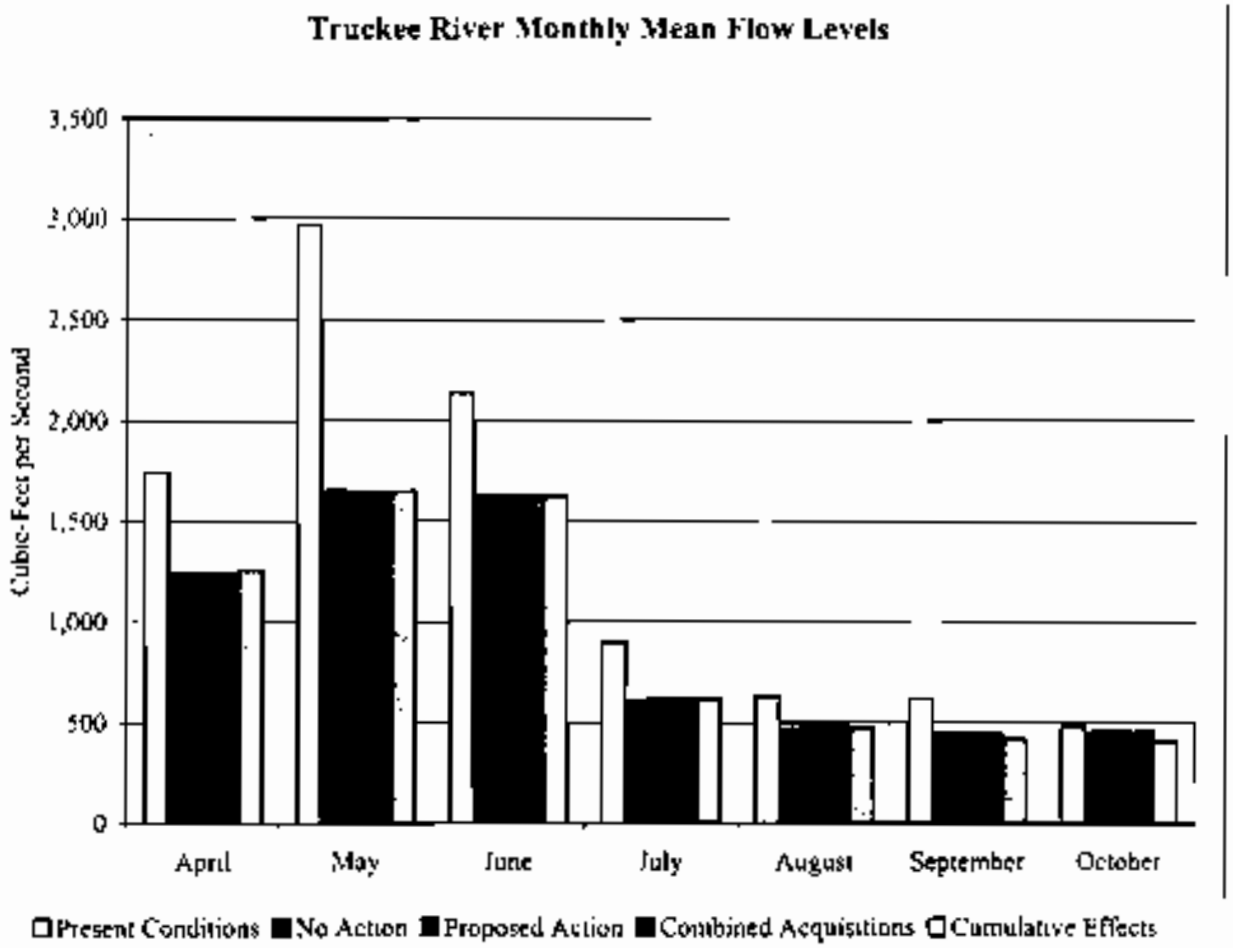
- Only model results for Present Conditions are shown for Donner Lake. Donner Lake is not affected by the Truckee River Water Quality Settlement Agreement.

- The Donner Lake visitation includes monthly camping and day use visitors and total expenditures.

- Next are the Prosser Reservoir end of the month reservoir storage levels and Prosser Reservoir visitation, Stampede Reservoir end of the month reservoir storage levels and Stampede Reservoir visitation, and, Boca Reservoir end of the month reservoir storage levels and Boca Reservoir visitation.

- Likewise, the Prosser Reservoir visitation, Stampede Reservoir visitation, and Boca Reservoir visitation include monthly camping and day use visitors and total expenditures.

- Model results end with the economic impacts on the regional economy from river and reservoir visitation. The economic impacts include total economic impact and related employment (job) and income responses.

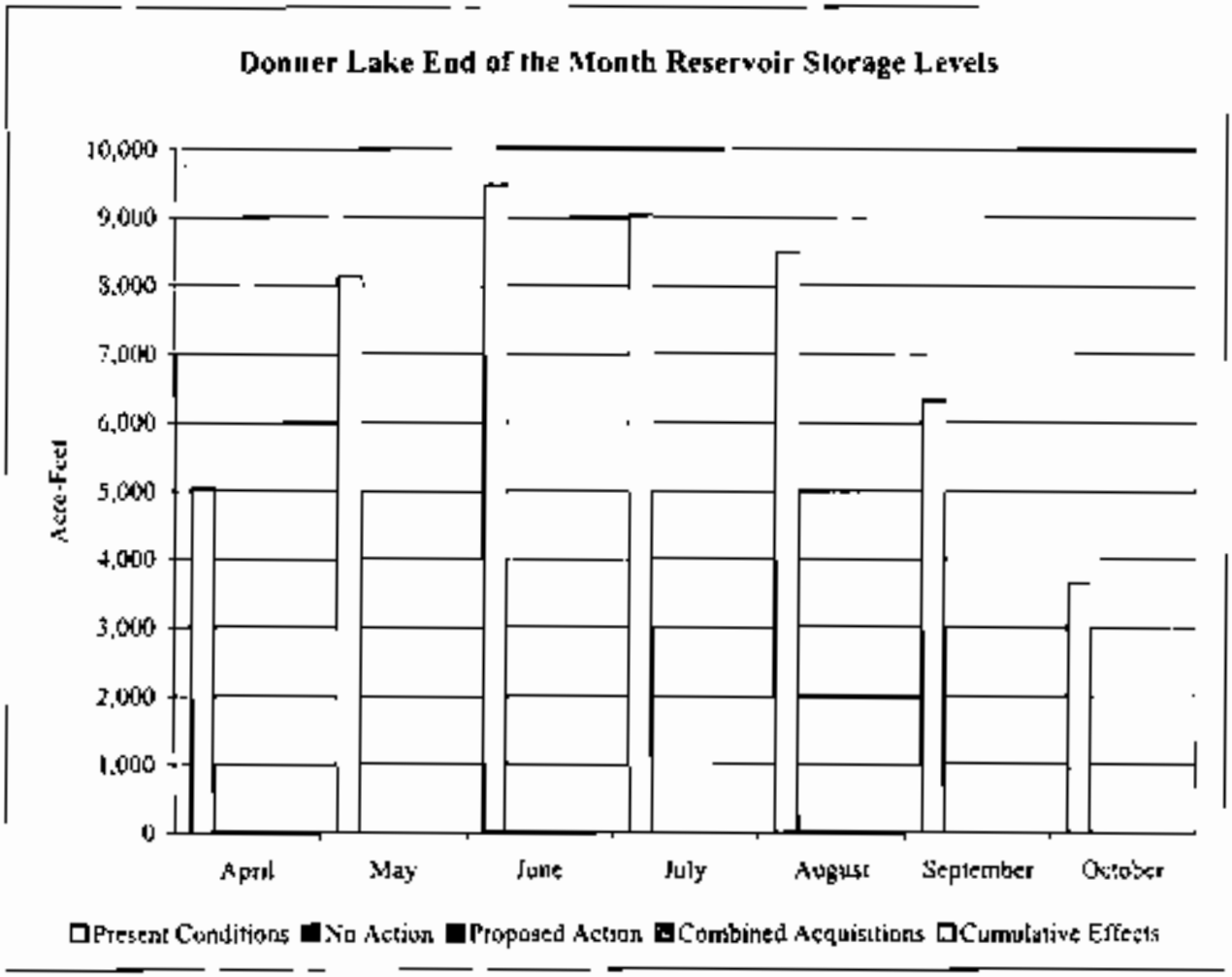


	Present Conditions /1	No Action /2	Proposed Action /3	Combined Acquisitions /4	Cumulative Effects
Monthly Mean River Flow Levels (cfs)					
April	1,741	1,244	1,241	1,237	1,256
May	2,965	1,654	1,645	1,641	1,647
June	2,138	1,628	1,629	1,621	1,620
July	898	612	622	627	618
August	630	471	477	480	473
September	617	448	449	451	419
October	480	458	457	461	410

1/ Present Conditions represent the 1999 Calendar Year.
2/ No Action represents the No Action Alternative.
3/ Proposed Action represents the Proposed Action - $12 Million Federal Acquisitions.
4/ Combined Acquisitions represents the Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million).

Truckee River Visitation

	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Monthly Fishing, Fly Fishing, Kayaking, and Rafting Visitors					
April	11,295	17,192	17,228	17,275	17,050
May	11,562	17,189	17,235	17,255	17,225
June	11,372	15,787	15,779	15,844	15,852
July	16,472	20,462	19,016	18,293	19,594
August	13,614	23,236	23,532	23,680	23,335
September	5,269	7,924	7,941	7,977	7,411
October	4,551	9,015	9,218	8,407	7,352
Total Visitors	74,136	110,805	109,949	108,731	107,819
Total Expenditures	2,402,329	3,601,088	3,570,138	3,524,799	3,482,893



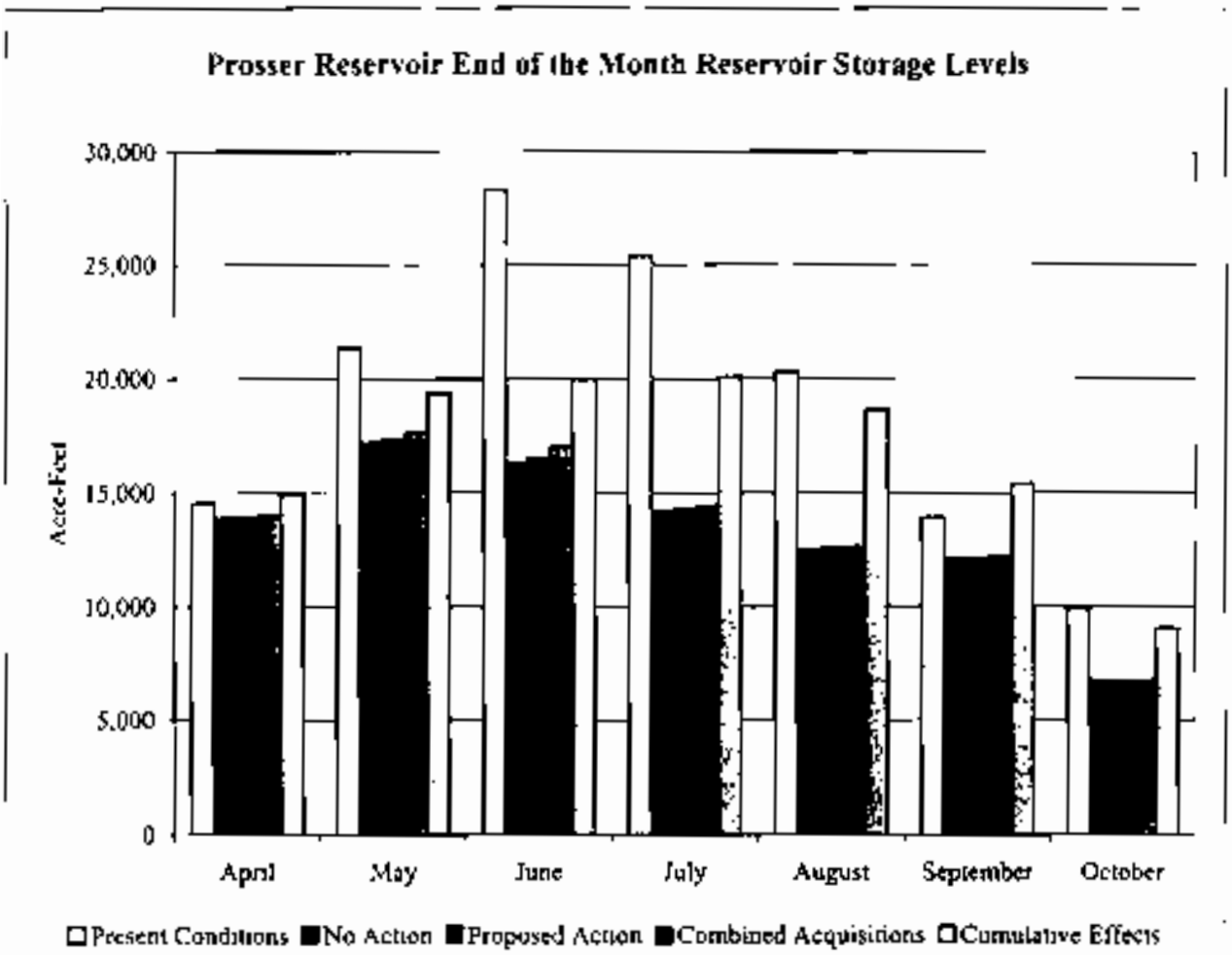
Present Conditions

End of the Month Reservoir Storage Levels (af)

April	5,040
May	8,130
June	9,470
July	9,030
August	8,490
September	6,330
October	3,650
Other Months (average)	3,604

Donner Lake Visitation

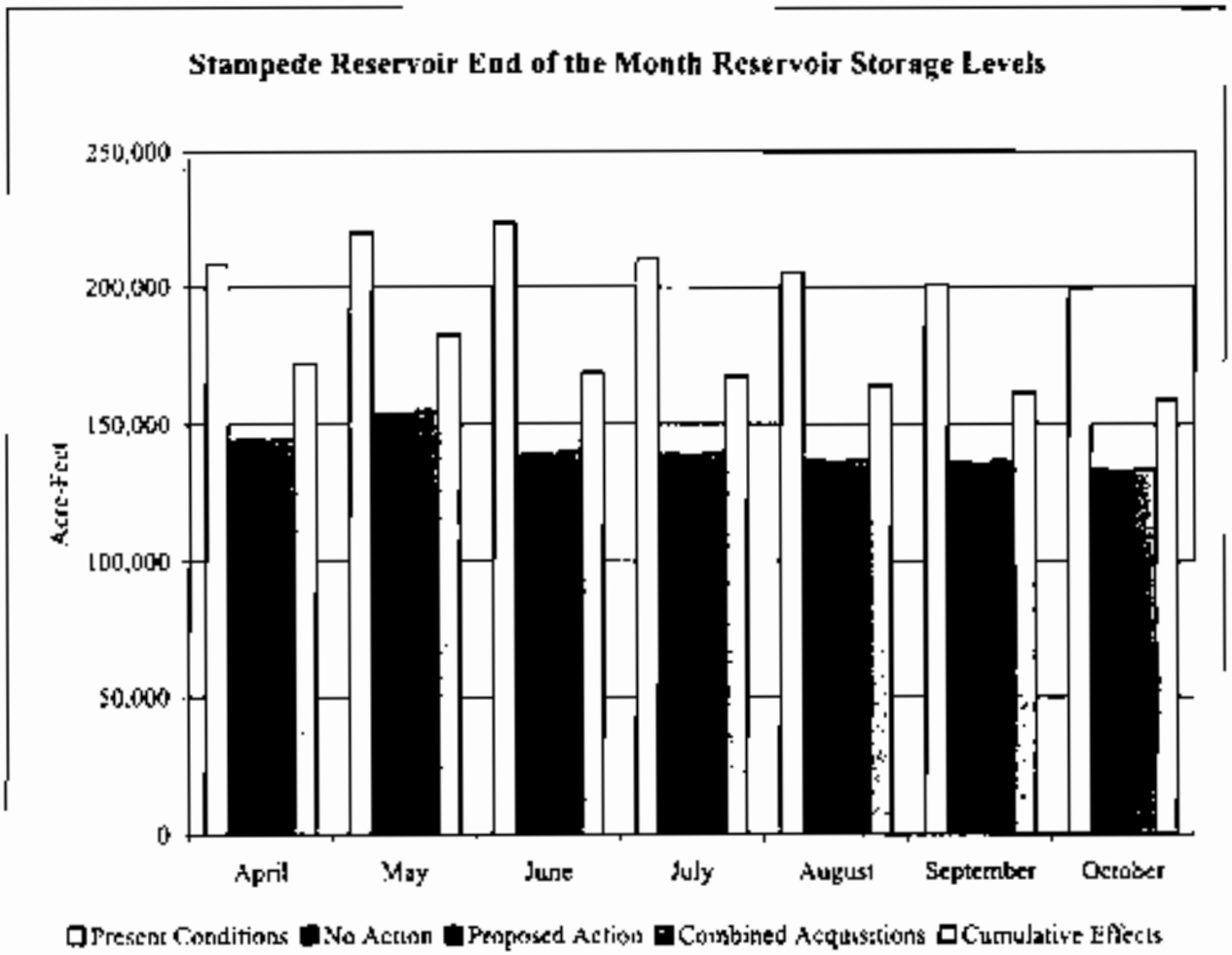
	Present Conditions
Monthly Camping and Day Use Visitors	
April	7,094
May	11,948
June	19,322
July	25,203
August	24,923
September	13,442
October	6,908
Other Months	5,974
Total Visitors	114,815
Total Expenditures	6,881,503



	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
End of the Month Reservoir Storage Levels (af)					
April	14,530	13,860	13,950	14,020	14,940
May	21,362	17,200	17,380	17,620	19,290
June	28,345	16,310	16,530	17,010	19,990
July	25,387	14,130	14,270	14,390	20,090
August	20,304	12,470	12,550	12,610	18,670
September	13,894	12,060	12,130	12,190	15,360
October	9,905	6,720	6,710	6,750	9,060
Other Months (average)	9,806	7,146	7,182	7,234	8,672

Prosser Reservoir Visitation

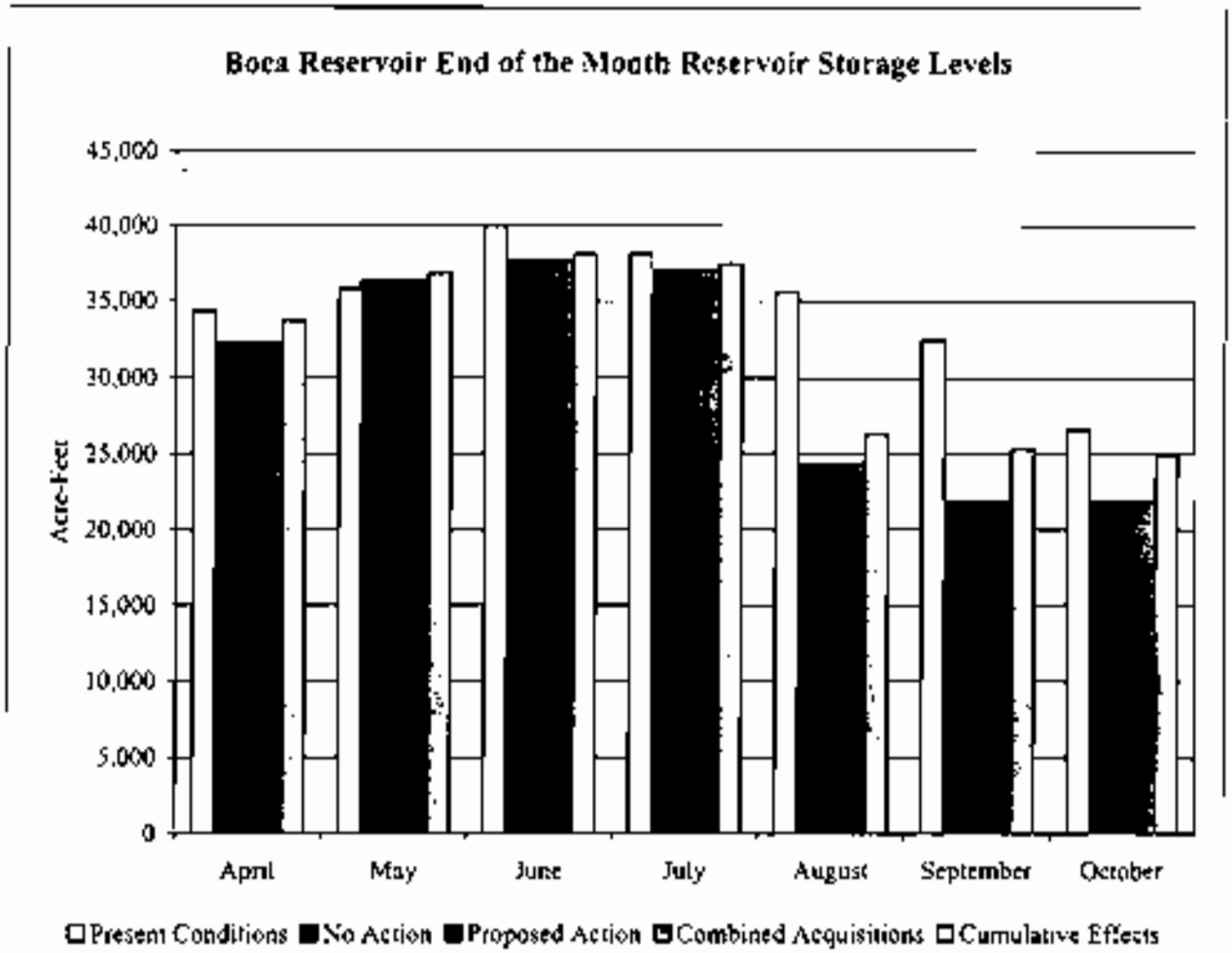
	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Monthly Camping and Day Use Visitors					
April	1,516	1,485	1,487	1,488	1,484
May	2,411	2,205	2,215	2,226	2,264
June	3,307	2,815	2,831	2,864	2,995
July	3,996	3,266	3,274	3,278	3,675
August	3,893	3,230	3,234	3,235	3,657
September	2,584	2,468	2,471	2,472	2,595
October	1,619	1,150	1,148	1,153	1,517
Other Months	930	707	710	715	843
Total Visitors	20,256	17,325	17,370	17,431	19,030
Total Expenditures	$809,975	692,775	694,558	696,982	760,957



	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
End of the Month Reservoir Storage Levels (af)					
April	208,322	144,130	143,970	144,840	171,910
May	219,968	153,840	154,100	154,990	182,760
June	223,544	138,760	138,850	139,930	168,630
July	210,529	138,840	138,460	139,600	167,550
August	205,086	136,590	135,900	136,920	164,160
September	200,752	136,120	135,440	136,350	161,540
October	199,616	133,050	132,560	133,390	158,960
Other Months (average)	202,678	136,184	135,764	136,554	162,470

Stampede Reservoir Visitation

	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Monthly Camping and Day Use Visitors					
April	4,346	3,983	3,982	3,986	4,245
May	8,503	7,848	7,852	7,858	8,221
June	13,668	12,375	12,378	12,392	12,890
July	14,739	13,410	13,406	13,422	13,942
August	15,368	13,974	13,965	13,979	14,450
September	9,574	8,739	8,727	8,741	9,020
October	4,913	4,454	4,449	4,458	4,614
Other Months	2,393	2,179	2,178	2,180	2,253
Total Visitors	73,504	66,962	66,937	67,016	69,566
Total Expenditures	4,003,093	3,646,806	3,645,432	3,649,774	3,788,624



	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
End of the Month Reservoir Storage Levels (af)					
April	34,385	32,290	32,280	32,270	33,750
May	35,816	36,350	36,350	36,350	36,870
June	39,954	37,670	37,660	37,660	38,690
July	38,131	37,060	37,030	37,020	37,450
August	35,579	24,380	24,320	24,310	26,290
September	32,483	21,980	21,910	21,910	25,300
October	26,647	21,870	21,850	21,810	24,860
Other Months (average)	26,222	23,286	23,266	23,182	26,694

Boca Reservoir Visitation

	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Monthly Camping and Day Use Visitors					
April	1,945	2,070	2,063	2,059	2,252
May	3,780	4,254	4,245	4,241	4,426
June	5,369	6,021	6,008	6,004	6,248
July	6,328	7,096	7,081	7,076	7,364
August	6,191	3,649	3,638	3,634	3,964
September	4,328	2,544	2,535	2,533	2,816
October	2,109	2,142	2,137	2,134	2,351
Other Months	1,968	1,125	1,122	1,119	1,257
Total Visitors	31,118	28,901	28,829	28,801	30,681
Total Expenditures	1,123,212	1,043,200	1,040,599	1,039,560	1,107,434

River Visitation Economic Impact

	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Total Economic Impact	2,563,909	3,827,435	3,799,069	3,753,373	3,707,511
Employment (Job) Response	36	53	53	52	52
Income Response	500,584	747,341	741,733	732,820	723,969

Reservoir Visitation Economic Impact

	Present Conditions	No Action	Proposed Action	Combined Acquisitions	Cumulative Effects
Total Economic Impact	10,330,921	3,058,037	3,057,492	3,061,293	3,227,862
Employment (Job) Response	141	40	40	40	42
Income Response	2,085,384	648,087	647,936	648,713	683,447

Model Calculations

- Model calculations are presented separately for Present Conditions, No Action Alternative, Proposed Action - $12 Million Federal Acquisitions, Combined Federal and Truckee Meadows Communities Acquisitions, and Cumulative Effects.

- Model calculations for Present Conditions and each of the other alternatives include a river visitation calculation, a reservoir visitation calculation, and an economic impact calculation.

- The river visitation calculation takes into account monthly mean river flow levels and predicts the visitation response (number of visitors) to monthly mean river flow levels and then computes the expenditures.

- The river visitation calculation predicts visitation response for all visitors which include fishing, fly fishing, kayaking, rafting, sightseeing, camping, hiking, and picnicking visitors, taken together, and separately for fishing, fly fishing, kayaking, and rafting visitors. Only the flow dependent visitation response is considered in the model results.

- The river visitation calculation linearly interpolates the given monthly mean flow levels between higher minimum flow, more consistent flow, higher flow, and 1999 flow levels with predetermined numbers of fishing, fly fishing, kayaking, and rafting visitors to arrive at the visitation response.

- The visitation response for Present Conditions, given 1999 monthly mean flow levels, is where the predicted and the 1999 predetermined number of visitors are equal to each other. Under each of the other alternatives, the visitation response will deviate from Present Conditions because of the flow levels and the predicted number of visitors will either be greater than or less than the 1999 visitor estimate.

- The river visitation calculation then multiplies average expenditures by the number of visitor groups for fishing, fly fishing, kayaking, and rafting visitors to arrive at the total expenditures for the visitation response.

- Likewise, the reservoir visitation calculation takes into account end of the month reservoir storage levels and predicts the visitation response (number of visitors) to end of the month reservoir storage levels and then computes expenditures.

- The reservoir visitation calculation predicts visitation response for camping and day use visitors.

- The reservoir visitation calculation takes the given end of the month reservoir storage levels and through an equation structure calculates a seasonal visitation percentage which in turn adjusts the 1999 predetermined number of camping and day use visitors to arrive at the visitation response.

- The visitation response for Present Conditions, given 1999 end of the month reservoir storage levels, is where the seasonal visitation percentage is calibrated and the predicted number of visitors equal the 1999 predetermined number of visitors. Under each of the other alternatives and depending on the reservoir storage levels, the visitation response will deviate from Present Conditions because the seasonal visitation percentage changes and computes the predicted number of visitors to be either greater than or less than the 1999 visitor estimate.

- The reservoir visitation calculation then multiplies the average expenditures by the number of visitor groups for camping and day use visitors to arrive at the total expenditures for the visitation response.

- The economic impact calculation sorts the expenditures for the visitation response from the river and reservoir visitation calculations into economic sectors and with the use of response coefficients and multipliers computes the economic impact.

Present Conditions
River Visitation Calculation

Monthly Mean River Flow Levels

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,741
May	2,965
June	2,138
July	898
August	630
September	617
October	480

Visitation Response to Monthly Mean River Flow Levels

April Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	714	1,172	1,741	1,771
All Visitors	17,574	17,356	9,886	12,092
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	15,584	6,555	5,472	8,481
Rafting Visitors	2,695	1,390	1,321	1,459

Predicted April Visitors

All Visitors	9,886
Fishing Visitors	1,579
Fly Fishing Visitors	2,923
Kayaking Visitors	5,472
Rafting Visitors	1,321
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	11,295

May Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	814	1,421	2,116	2,965
All Visitors	17,574	17,356	12,092	9,886
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	16,344	6,875	8,895	5,739
Rafting Visitors	2,695	1,390	1,459	1,321

Predicted May Visitors

All Visitors	9,886
Fishing Visitors	1,579
Fly Fishing Visitors	2,923
Kayaking Visitors	5,739
Rafting Visitors	1,321
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	11,562

June Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	691	1,247	1,974	2,138
All Visitors	24,384	24,082	16,778	13,717
Fishing Visitors	4,788	6,985	3,401	3,401
Fly Fishing Visitors	3,953	5,803	2,473	2,473
Kayaking Visitors	6,462	2,718	3,517	2,269
Rafting Visitors	6,589	3,398	3,566	3,220

Predicted June Visitors

All Visitors	13,717
Fishing Visitors	3,401
Fly Fishing Visitors	2,473
Kayaking Visitors	2,269
Rafting Visitors	3,230
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	11,372

July Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	521	553	629	898
All Visitors	27,459	27,120	18,894	15,447
Fishing Visitors	5,985	8,732	4,251	4,251
Fly Fishing Visitors	8,805	12,925	5,508	5,508
Kayaking Visitors	5,321	2,238	2,896	1,868
Rafting Visitors	9,883	5,096	5,348	4,845

Predicted July Visitors

All Visitors	15,447
Fishing Visitors	4,251
Fly Fishing Visitors	5,508
Kayaking Visitors	1,868
Rafting Visitors	4,845
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	16,472

August Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	503	524	568	630
All Visitors	25,482	25,167	17,534	14,334
Fishing Visitors	4,959	7,235	3,522	3,522
Fly Fishing Visitors	7,727	11,342	4,834	4,834
Kayaking Visitors	4,941	2,078	2,689	1,735
Rafting Visitors	7,188	3,707	3,890	3,523

Predicted August Visitors

All Visitors	14,334
Fishing Visitors	3,522
Fly Fishing Visitors	4,834
Kayaking Visitors	1,735
Rafting Visitors	3,523
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	13,614

September Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	488	509	551	617
All Visitors	9,226	9,112	6,348	5,190
Fishing Visitors	1,881	2,744	1,336	1,336
Fly Fishing Visitors	5,391	7,913	3,373	3,373
Kayaking Visitors	760	320	414	267
Rafting Visitors	599	309	324	294

Predicted September Visitors

All Visitors	5,190
Fishing Visitors	1,336
Fly Fishing Visitors	3,373
Kayaking Visitors	267
Rafting Visitors	294
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	5,269

October Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	415	454	480	544
All Visitors	8,787	8,678	4,943	6,046
Fishing Visitors	1,710	2,495	1,215	1,215
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	760	320	267	414
Rafting Visitors	299	154	147	162

Predicted October Visitors

All Visitors	4,943
Fishing Visitors	1,215
Fly Fishing Visitors	2,923
Kayaking Visitors	267
Rafting Visitors	147
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	4,551

Predicted Visitors

All Visitors	73,402
Fishing Visitors	16,882
Fly Fishing Visitors	24,957
Kayaking Visitors	17,616
Rafting Visitors	14,680
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	74,136

Average Visitor Group Size	3.66

Predicted Visitor Groups

All Visitor Groups	20,062
Fishing Visitor Groups	4,614
Fly Fishing Visitor Groups	6,821
Kayaking Visitor Groups	4,815
Rafting Visitor Groups	4,012
Fishing, Fly Fishing, Kayaking, and Rafting Visitor Groups	20,263

Expenditures

Average Expenditures by Category for All Visitor Groups

Camping Fees	5.99
License Fees	7.14
Hotel and Motel	22.91
Restaurant	25.43
Groceries and Supplies	27.30
Gas	14.68
Shopping	12.91
Equipment Rentals	4.29
Fishing Supplies	11.18
Guide Services	5.25
Other	1.10
Total	138.18

Predicted Expenditures by Category for All Visitor Groups

Camping Fees	120,264
License Fees	143,193
Hotel and Motel	459,672
Restaurant	510,269
Groceries and Supplies	547,638
Gas	294,543
Shopping	259,048
Equipment Rentals	85,982
Fishing Supplies	224,324
Guide Services	105,273
Other	22,047
Total	2,772,251

Average Expenditures by Category for Fishing Visitor Groups

Camping Fees	9.10
License Fees	13.93
Hotel and Motel	0.00
Restaurant	8.90
Groceries and Supplies	14.64
Gas	9.17
Shopping	10.00
Equipment Rentals	5.24
Fishing Supplies	15.83
Guide Services	0.00
Other	3.33
Total	90.14

Predicted Expenditures by Category for Fishing Visitor Groups

Camping Fees	41,969
License Fees	64,271
Hotel and Motel	0
Restaurant	41,090
Groceries and Supplies	67,567
Gas	42,298
Shopping	46,144
Equipment Rentals	24,170
Fishing Supplies	73,061
Guide Services	0
Other	15,381
Total	415,951

Average Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	4.06
License Fees	8.24
Hotel and Motel	37.20
Restaurant	25.23
Groceries and Supplies	31.52
Gas	12.58
Shopping	9.02
Equipment Rentals	1.97
Fishing Supplies	15.38
Guide Services	7.80
Other	0.00
Total	152.98

Predicted Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	27,698
License Fees	56,223
Hotel and Motel	253,729
Restaurant	172,081
Groceries and Supplies	214,972
Gas	85,782
Shopping	61,494
Equipment Rentals	13,436
Fishing Supplies	104,902
Guide Services	53,226
Other	0
Total	1,043,543

Average Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0.00
License Fees	1.96
Hotel and Motel	0.00
Restaurant	10.00
Groceries and Supplies	9.30
Gas	14.89
Shopping	2.17
Equipment Rentals	2.17
Fishing Supplies	4.35
Guide Services	0.00
Other	0.00
Total	44.85

Predicted Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0
License Fees	9,421
Hotel and Motel	0
Restaurant	48,150
Groceries and Supplies	44,800
Gas	71,701
Shopping	10,467
Equipment Rentals	10,467
Fishing Supplies	20,935
Guide Services	0
Other	0
Total	215,941

Average Expenditures by Category for Rafting Visitor Groups

Camping Fees	5.89
License Fees	0.66
Hotel and Motel	45.13
Restaurant	40.26
Groceries and Supplies	31.45
Gas	12.37
Shopping	24.61
Equipment Rentals	7.63
Fishing Supplies	0.00
Guide Services	11.58
Other	1.58
Total	181.16

Predicted Expenditures by Category for Rafting Visitor Groups

Camping Fees	23,653
License Fees	2,640
Hotel and Motel	181,090
Restaurant	161,555
Groceries and Supplies	126,182
Gas	49,628
Shopping	98,728
Equipment Rentals	30,622
Fishing Supplies	0
Guide Services	46,460
Other	6,335
Total	726,893

Summary

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,741
May	2,965
June	2,138
July	898
August	630
September	617
October	480
Predicted Fishing, Fly Fishing, Kayaking, and Rafting Visitors by Month	
April	11,295
May	11,562
June	11,372
July	16,472
August	13,614
September	5,269
October	4,551
Total	74,136
Predicted Expenditures by Category for Fishing, Fly Fishing, Kayaking, and Rafting Visitors	
Camping Fees	93,319
License Fees	132,555
Hotel and Motel	434,818
Restaurant	422,876
Groceries and Supplies	453,521
Gas	249,410
Shopping	216,833
Equipment Rentals	78,695
Fishing Supplies	198,897
Guide Services	99,687
Other	21,717
Total	2,402,329

Predicted Expenditures by Economic Sector for Fishing, Fly Fishing, Kayaking, and Rafting Visitors

Trade :1	290,797
Eating, Drinking, and Lodging :2	422,876
Hotels, Gaming, and Recreation :3	613,200
Other Final Payments :4	225,875
Imports :5	849,582
Total	2,402,329

1/ The Trade sector includes only the mark-up value (25.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

2/ The Eating, Drinking, and Lodging sector includes Restaurant Expenditures.

3/ The Hotels, Gaming, and Recreation sector includes Hotel and Motel, Equipment Rentals, and Guide Services Expenditures.

4/ The Other Final Payments sector includes Camping Fees and License Fees.

5/ The Imports sector includes the Trade sector balance (74.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures

Present Conditions
Reservoir Visitation Calculation

End of the Month Reservoir Storage Levels

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)				
April	5,040	14,530	208,322	34,385
May	8,130	21,362	219,968	35,816
June	9,470	28,345	223,544	39,984
July	9,030	25,387	210,529	38,131
August	8,490	20,304	205,086	35,579
September	6,330	13,894	200,752	32,483
October	3,650	9,905	199,616	26,647
Other Months (average)	3,604	9,806	202,678	26,222
January	3,770	9,676	204,633	32,789
February	3,800	9,859	204,208	32,886
March	3,960	9,811	204,663	32,553
November	3,290	9,939	199,863	20,918
December	3,200	9,744	200,022	11,965

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Reservoir Storage Levels				
Level 1	9,660	29,840	226,500	40,870
Level 2	8,694	26,856	203,850	36,783
Level 3	7,728	23,872	181,200	32,696
Level 4	6,762	20,888	158,550	28,609
Level 5	5,796	17,904	135,900	24,522
Level 6		14,920	113,250	20,435
Level 7		11,936	90,600	16,348
Level 8		8,952	67,950	12,261
Level 9		5,968	45,300	8,174
Level 10		2,984	22,650	4,087
Level 11		0	0	0
Scale Values for Reservoir Storage Levels				
Level 1	5.000000	11.000000	11.000000	11.000000
Level 2	4.000000	10.000000	10.000000	10.000000
Level 3	3.000000	9.000000	9.000000	9.000000
Level 4	2.000000	8.000000	8.000000	8.000000
Level 5	1.000000	7.000000	7.000000	7.000000
Level 6		6.000000	6.000000	6.000000
Level 7		5.000000	5.000000	5.000000
Level 8		4.000000	4.000000	4.000000
Level 9		3.000000	3.000000	3.000000
Level 10		2.000000	2.000000	2.000000
Level 11		1.000000	1.000000	1.000000
Slope Coefficient for Scale Value Equation	0.001035	0.000335	0.000044	0.000245
Constant Term for Scale Value Equation	-5.000000	1.000000	1.000000	1.000000
Scale Values for the End of the Month Reservoir Storage Levels				
April	1.000000	5.869303	10.197439	9.413262
May	3.416149	8.158847	10.711611	9.763396
June	4.803313	10.498995	10.869492	10.783215
July	4.347826	9.507708	10.294879	10.329826
August	3.788820	7.804290	10.054570	9.705407
September	1.552795	5.656166	9.863223	8.947884
October	1.000000	4.319370	9.813068	7.519941
Other Months	1.000000	4.286126	9.948247	7.416002

Visitation Response to the End of the Month Reservoir Storage Levels

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Visits by Visitor for Reservoir Storage Levels				
Level 1	5.89	3.74	3.20	6.22
Level 2	5.84	3.74	3.18	6.22
Level 3	4.65	3.64	3.09	6.06
Level 4	4.53	3.55	2.97	3.59
Level 5	4.46	3.34	2.89	3.25
Level 6		3.09	2.71	3.02
Level 7		2.90	2.16	2.68
Level 8		2.57	1.27	2.33
Level 9		1.69	0.73	1.94
Level 10		1.55	0.69	1.76
Level 11		1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels				
Level 1	100.00%	100.00%	100.00%	100.00%
Level 2	99.20%	100.00%	99.16%	100.00%
Level 3	78.97%	97.29%	96.30%	97.40%
Level 4	76.84%	94.93%	92.61%	57.62%
Level 5	75.64%	89.36%	90.16%	52.29%
Level 6		82.50%	84.49%	48.56%
Level 7		77.49%	67.52%	43.06%
Level 8		68.64%	39.68%	37.45%
Level 9		45.19%	22.77%	31.12%
Level 10		41.48%	21.65%	28.20%
Level 11		41.48%	20.68%	22.74%
Slope Coefficients for Visitation Equations for Reservoir Storage Levels				
Level 1	0.008037	0.000000	0.008382	0.000000
Level 2	0.202308	0.027102	0.028639	0.025964
Level 3	0.021228	0.023599	0.036846	0.397581
Level 4	0.012031	0.055678	0.024535	0.053243
Level 5	0.000000	0.068584	0.056666	0.037347
Level 6		0.050147	0.169737	0.055004
Level 7		0.088496	0.278442	0.056046
Level 8		0.234513	0.169039	0.063362
Level 9		0.037058	0.011176	0.029143
Level 10		0.000000	0.009779	0.054577
Level 11		0.000000	0.000000	0.000000

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Constant Terms for Visitation Equations for Reservoir Storage Levels				
Level 1	0.959817	1.000000	0.907797	1.000000
Level 2	0.182731	0.728982	0.705230	0.740364
Level 3	0.725970	0.760509	0.631363	-2.606588
Level 4	0.744364	0.503872	0.729852	0.150209
Level 5	0.756395	0.413532	0.504933	0.261482
Level 6		0.524152	-0.173492	0.155542
Level 7		0.332412	-0.717017	0.150329
Level 8		-0.251659	-0.279403	0.121067
Level 9		0.340708	0.194185	0.223724
Level 10		0.414823	0.196979	0.172857
Level 11		0.414823	0.206758	0.227434
Visitation Response to the End of the Month Reservoir Storage Levels				
April	75.64%	81.85%	99.33%	98.48%
May	87.38%	95.30%	99.76%	99.39%
June	99.84%	100.00%	99.89%	100.00%
July	99.48%	98.67%	99.41%	100.00%
August	94.92%	93.84%	99.21%	99.24%
September	76.30%	80.78%	98.77%	95.33%
October	75.64%	71.47%	98.63%	55.06%
Other Months	75.64%	71.17%	99.01%	54.51%
1999 Visitation Response to the End of the Month Reservoir Storage Levels				
April	75.64%	81.85%	99.33%	98.48%
May	87.38%	95.30%	99.76%	99.39%
June	99.84%	100.00%	99.89%	100.00%
July	99.48%	98.67%	99.41%	100.00%
August	94.92%	93.84%	99.21%	99.24%
September	76.30%	80.78%	98.77%	95.33%
October	75.64%	71.47%	98.63%	55.06%
Other Months	75.64%	71.17%	99.01%	54.51%
1994 and 1999 Visitors that Visit by Month				
April	76	44	69	71
May	128	70	135	138
June	207	96	217	196
July	270	116	234	231
August	267	113	244	226
September	144	75	152	158
October	74	47	78	77
Other Months	64	27	38	39
Total	1,230	588	1,167	1,136

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Visitors that Visit by Month				
April	76	44	69	71
May	128	70	135	138
June	207	96	217	196
July	270	116	234	231
August	267	113	244	226
September	144	75	152	158
October	74	47	78	77
Other Months	64	27	38	39
Total	1,230	588	1,167	1,136
Weights for the Predicted Visitors that Visit by Month				
April	6.18%	7.48%	5.91%	6.25%
May	10.41%	11.90%	11.57%	12.15%
June	16.83%	16.33%	18.59%	17.25%
July	21.95%	19.73%	20.05%	20.33%
August	21.71%	19.22%	20.91%	19.89%
September	11.71%	12.76%	13.02%	13.91%
October	6.02%	7.99%	6.68%	6.78%
Other Months	5.20%	4.59%	3.26%	3.43%
Weighted Scale Value for the End of the Month Reservoir Storage Levels				
April	0.061789	0.439200	0.602933	0.588329
May	0.355502	0.971291	1.239132	1.186046
June	0.808362	1.714122	2.021148	1.860484
July	0.954401	1.875670	2.064269	2.100519
August	0.822451	1.499804	2.102241	1.930829
September	0.181791	0.721450	1.284670	1.244512
October	0.060163	0.345256	0.655886	0.509714
Other Months	0.052033	0.196812	0.323936	0.254599
Total	3.296490	7.763604	10.294216	9.675033
Predicted Visitation Response	84.96%	93.61%	99.41%	99.16%
1999 Visitation Response	84.96%	93.61%	99.41%	99.16%
1999 Camping Visitors	43,343	13,117	61,592	16,824
Predicted Camping Visitors	43,343	13,117	61,592	16,824

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Camping Visitors by Month				
April	2,678	982	3,642	1,051
May	4,510	1,562	7,125	2,044
June	7,294	2,142	11,453	2,903
July	9,514	2,588	12,350	3,421
August	9,408	2,521	12,878	3,347
September	5,074	1,673	8,022	2,340
October	2,608	1,048	4,117	1,140
Other Months	2,255	602	2,006	578
Total	43,343	13,117	61,592	16,824
Average Group Size of Camping Visitors	4.98	4.76	5.68	5.03
Predicted Camping Visitor Groups	8,699	2,755	10,842	3,348
1999 Day Use Visitors	71,472	7,140	11,912	14,294
Predicted Day Use Visitors	71,472	7,140	11,912	14,294
Predicted Day Use Visitors by Month				
April	4,416	534	704	893
May	7,438	850	1,378	1,736
June	12,028	1,166	2,215	2,466
July	15,689	1,408	2,389	2,907
August	15,515	1,372	2,491	2,844
September	8,367	911	1,552	1,988
October	4,300	571	796	969
Other Months	3,719	328	388	491
Total	71,472	7,140	11,912	14,294
Average Group Size of Day Use Visitors	4.56	3.39	3.50	4.90
Predicted Day Use Visitor Groups	15,673	2,107	3,403	2,919

Expenditures

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Expenditures by Category for Camping Visitor Groups				
Licenses	4.43	8.31	11.71	15.64
Camping Fees	51.98	26.13	65.10	32.38
Hotel or Motel	12.02	2.61	1.65	5.50
Restaurant	37.45	9.61	12.74	8.43
Groceries	73.20	68.39	152.65	115.63
Equipment and Supplies	0.00	0.00	3.53	0.04
Rental	10.30	32.61	9.93	0.08
Fuel	35.25	21.32	45.64	30.98
Other	36.35	24.86	38.66	43.45
Total	260.99	193.63	341.59	252.12
Predicted Expenditures by Category for Camping Visitor Groups				
Licenses	38,535	22,341	126,909	52,363
Camping Fees	452,169	71,999	705,823	108,393
Hotel or Motel	104,571	7,187	17,839	18,412
Restaurant	325,810	26,467	138,118	28,209
Groceries	636,756	188,415	1,654,982	387,516
Equipment and Supplies	0	0	38,265	134
Rental	89,615	89,841	107,651	256
Fuel	306,657	58,738	494,810	103,736
Other	316,235	68,489	419,179	145,475
Total	2,270,350	533,477	3,703,578	844,094
1994 and 1999 Average Expenditures by Category for Day Use Visitor Groups				
Licenses	7.14	13.97	12.59	8.65
Camping Fees	2.83	2.22	0.00	3.55
Hotel or Motel /1	46.37	0.33	15.63	13.58
Restaurant	51.86	20.56	7.24	9.25
Groceries	59.98	20.28	27.28	24.76
Equipment and Supplies	2.22	1.50	0.89	2.38
Rental	40.12	54.17	0.00	5.10
Fuel	31.67	13.78	20.57	23.58
Other	52.02	4.44	3.80	4.77
Total	294.21	131.24	88.00	95.62

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Category for Day Use Visitor Groups				
Licenses	111,895	29,422	42,847	25,248
Camping Fees	44,306	4,682	0	10,376
Hotel or Motel :1	726,724	702	53,201	39,637
Restaurant	812,882	43,308	24,630	26,999
Groceries	940,035	42,722	92,842	72,271
Equipment and Supplies	34,848	3,160	3,031	6,934
Rental	628,753	114,115	0	14,896
Fuel	496,388	29,024	70,025	68,830
Other	815,321	9,363	12,942	13,927
Total	4,611,152	276,498	299,514	279,119

1: Expenditures on hotel or motel include vacation-home rent expenditures

Summary

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)				
April	5,040	14,530	208,322	34,385
May	8,130	21,362	219,968	35,816
June	9,470	28,345	223,544	39,984
July	9,030	25,387	210,529	38,131
August	8,490	20,304	205,086	35,579
September	6,330	13,894	200,752	32,483
October	3,650	9,905	199,616	26,647
Other Months (average)	3,604	9,806	202,678	26,222
Predicted Camping and Day Use Visitors by Month				
April	7,094	1,516	4,346	1,945
May	11,948	2,411	8,503	3,780
June	19,322	3,307	13,668	5,369
July	25,203	3,996	14,739	6,328
August	24,923	3,893	15,368	6,191
September	13,442	2,584	9,574	4,328
October	6,908	1,619	4,913	2,109
Other Months	5,974	930	2,393	1,068
Total	114,815	20,256	73,504	31,118
Predicted Expenditures by Category for Camping and Day Use Visitors				
Licenses	150,430	51,762	269,756	77,611
Camping Fees	496,475	76,680	705,823	518,769
Hotel or Motel	831,295	7,890	71,040	58,050
Restaurant	1,138,693	69,775	162,748	55,207
Groceries	1,576,791	231,137	1,747,824	459,387
Equipment and Supplies	34,848	3,160	41,296	7,067
Rental	718,368	203,956	107,651	15,152
Fuel	803,045	87,762	564,831	172,566
Other	1,131,557	77,852	432,121	159,402
Total	6,881,503	809,975	4,003,093	1,123,212

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Economic Sector for Camping and Day Use Visitors				
Trade /2	904,291	101,977	710,449	203,598
Eating, Drinking, and Lodging /3	1,138,693	69,775	162,748	55,207
Hotels, Gaming, and Recreation /4	1,549,664	211,846	178,692	73,202
Other Final Payments /5	646,905	128,443	875,579	196,360
Imports /6	2,641,950	297,934	2,075,625	594,825
Total	6,881,503	809,975	4,003,093	1,123,212

2/ The Trade sector includes only the mark-up value (25.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

3/ The Eating, Drinking, and Lodging sector includes Expenditures on Restaurant.

4/ The Hotels, Gaming, and Recreation sector includes Expenditures on Hotel or Motel, and Rental.

5/ The Other Final Payments sector includes Expenditures on Licenses and Camping Fees.

6/ The Imports sector includes the Trade sector balance (74.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

Present Conditions
Economic Impact Calculation

River Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	290,797		
Eating, Drinking, and Lodging	422,876		
Hotels, Gaming, and Recreation	613,200		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	290,797	5	89,979
Eating, Drinking, and Lodging	422,876	12	97,547
Hotels, Gaming, and Recreation	613,200	10	98,917
Total	1,326,872	27	286,444
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	2,563,909	36	500,584

Reservoir Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	1,920,316		
Eating, Drinking, and Lodging	1,426,423		
Hotels, Gaming, and Recreation	2,013,404		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	1,920,316	33	594,191
Eating, Drinking, and Lodging	1,426,423	40	329,041
Hotels, Gaming, and Recreation	2,013,404	34	324,788
Total	5,360,142	107	1,248,020
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	10,330,921	141	2,085,384

No Action Alternative
River Visitation Calculation

Monthly Mean River Flow Levels

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,244
May	1,654
June	1,628
July	612
August	471
September	448
October	458

Visitation Response to Monthly Mean River Flow Levels

April Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	714	1,172	1,741	1,771
All Visitors	17,574	17,356	9,886	12,092
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	15,584	6,555	5,472	8,481
Rafting Visitors	2,695	1,390	1,321	1,459

Predicted April Visitors

All Visitors	16,411
Fishing Visitors	3,033
Fly Fishing Visitors	6,360
Kayaking Visitors	6,418
Rafting Visitors	1,381
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,192

May Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	814	1,421	2,116	2,965
All Visitors	17,574	17,356	12,092	9,886
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	16,344	6,875	8,895	5,739
Rafting Visitors	2,695	1,390	1,459	1,321

Predicted May Visitors

All Visitors	15,592
Fishing Visitors	2,685
Fly Fishing Visitors	5,539
Kayaking Visitors	7,552
Rafting Visitors	1,413
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,189

June Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	691	1,247	1,974	2,138
All Visitors	24,384	24,082	16,778	15,717
Fishing Visitors	4,788	6,985	3,401	3,401
Fly Fishing Visitors	3,953	5,803	2,473	2,473
Kayaking Visitors	6,462	2,718	3,517	2,269
Rafting Visitors	6,589	3,398	3,566	3,230

Predicted June Visitors

All Visitors	20,254
Fishing Visitors	5,107
Fly Fishing Visitors	4,058
Kayaking Visitors	3,137
Rafting Visitors	3,486
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	15,787

July Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	521	553	629	898
All Visitors	27,459	27,120	18,894	15,447
Fishing Visitors	5,985	8,732	4,251	4,251
Fly Fishing Visitors	8,805	12,925	5,508	5,508
Kayaking Visitors	5,321	2,238	2,896	1,868
Rafting Visitors	9,883	5,096	5,348	4,845

Predicted July Visitors

All Visitors	20,734
Fishing Visitors	5,253
Fly Fishing Visitors	7,167
Kayaking Visitors	2,749
Rafting Visitors	5,292
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	20,462

August Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	503	524	568	630
All Visitors	25,482	25,167	17,534	14,334
Fishing Visitors	4,959	7,235	3,522	3,522
Fly Fishing Visitors	7,727	11,342	4,834	4,834
Kayaking Visitors	4,941	2,078	2,689	1,735
Rafting Visitors	7,188	3,707	3,890	3,523

Predicted August Visitors

All Visitors	23,861
Fishing Visitors	4,644
Fly Fishing Visitors	7,235
Kayaking Visitors	4,627
Rafting Visitors	6,730
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	23,236

September Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	488	509	551	617
All Visitors	9,226	9,112	6,348	5,190
Fishing Visitors	1,881	2,744	1,336	1,336
Fly Fishing Visitors	5,391	7,913	3,373	3,373
Kayaking Visitors	760	320	414	267
Rafting Visitors	599	309	324	294

Predicted September Visitors

All Visitors	8,470
Fishing Visitors	1,727
Fly Fishing Visitors	4,949
Kayaking Visitors	698
Rafting Visitors	550
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	7,924

October Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	415	454	480	544
All Visitors	8,787	8,678	4,943	6,046
Fishing Visitors	1,710	2,495	1,215	1,215
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	760	320	267	414
Rafting Visitors	299	154	147	162
Predicted October Visitors				
All Visitors	8,104			
Fishing Visitors	2,298			
Fly Fishing Visitors	6,253			
Kayaking Visitors	312			
Rafting Visitors	153			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	9,015			
Predicted Visitors				
All Visitors	113,426			
Fishing Visitors	24,746			
Fly Fishing Visitors	41,562			
Kayaking Visitors	25,492			
Rafting Visitors	19,005			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	110,805			
Average Visitor Group Size	3.66			
Predicted Visitor Groups				
All Visitor Groups	31,002			
Fishing Visitor Groups	6,764			
Fly Fishing Visitor Groups	11,360			
Kayaking Visitor Groups	6,968			
Rafting Visitor Groups	5,195			
Fishing, Fly Fishing, Kayaking, and Rafting Visitor Groups	30,286			

Expenditures

Average Expenditures by Category for All Visitor Groups

Camping Fees	5.99
License Fees	7.14
Hotel and Motel	22.91
Restaurant	25.43
Groceries and Supplies	27.30
Gas	14.68
Shopping	12.91
Equipment Rentals	4.29
Fishing Supplies	11.18
Guide Services	5.25
Other	1.10
Total	138.18

Predicted Expenditures by Category for All Visitor Groups

Camping Fees	185,841
License Fees	221,271
Hotel and Motel	710,317
Restaurant	788,503
Groceries and Supplies	846,248
Gas	455,148
Shopping	400,299
Equipment Rentals	132,865
Fishing Supplies	346,642
Guide Services	162,675
Other	34,068
Total	4,283,877

Average Expenditures by Category for Fishing Visitor Groups

Camping Fees	9.10
License Fees	13.93
Hotel and Motel	0.00
Restaurant	8.90
Groceries and Supplies	14.64
Gas	9.17
Shopping	10.00
Equipment Rentals	5.24
Fishing Supplies	15.83
Guide Services	0.00
Other	3.33
Total	90.14

Predicted Expenditures by Category for Fishing Visitor Groups

Camping Fees	61,517
License Fees	94,208
Hotel and Motel	0
Restaurant	60,229
Groceries and Supplies	99,040
Gas	62,000
Shopping	67,637
Equipment Rentals	35,429
Fishing Supplies	107,092
Guide Services	0
Other	22,546
Total	609,698

Average Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	4.06
License Fees	8.24
Hotel and Motel	37.20
Restaurant	25.23
Groceries and Supplies	31.52
Gas	12.58
Shopping	9.02
Equipment Rentals	1.97
Fishing Supplies	15.38
Guide Services	7.80
Other	0.00
Total	152.98

Predicted Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	46,128
License Fees	93,632
Hotel and Motel	422,549
Restaurant	286,576
Groceries and Supplies	358,005
Gas	142,858
Shopping	102,410
Equipment Rentals	22,375
Fishing Supplies	174,700
Guide Services	88,641
Other	0
Total	1,737,874

Average Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0.00
License Fees	1.96
Hotel and Motel	0.00
Restaurant	10.00
Groceries and Supplies	9.30
Gas	14.89
Shopping	2.17
Equipment Rentals	2.17
Fishing Supplies	4.35
Guide Services	0.00
Other	0.00
Total	44.85

Predicted Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0
License Fees	13,632
Hotel and Motel	0
Restaurant	69,676
Groceries and Supplies	64,829
Gas	103,756
Shopping	15,147
Equipment Rentals	15,147
Fishing Supplies	30,294
Guide Services	0
Other	0
Total	312,480

Average Expenditures by Category for Rafting Visitor Groups

Camping Fees	5.59
License Fees	0.66
Hotel and Motel	45.13
Restaurant	40.26
Groceries and Supplies	31.45
Gas	12.37
Shopping	24.61
Equipment Rentals	7.63
Fishing Supplies	0.00
Guide Services	11.58
Other	1.58
Total	181.16

Predicted Expenditures by Category for Rafting Visitor Groups

Camping Fees	30,621
License Fees	3,417
Hotel and Motel	234,439
Restaurant	209,150
Groceries and Supplies	163,355
Gas	64,249
Shopping	127,814
Equipment Rentals	39,643
Fishing Supplies	0
Guide Services	60,148
Other	8,202
Total	941,037

Summary

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,244
May	1,654
June	1,628
July	612
August	471
September	448
October	458
Predicted Fishing, Fly Fishing, Kayaking, and Rafting Visitors by Month	
April	17,192
May	17,189
June	15,787
July	20,462
August	23,236
September	7,924
October	9,015
Total	110,805
Predicted Expenditures by Category for Fishing, Fly Fishing, Kayaking, and Rafting Visitors	
Camping Fees	138,266
License Fees	204,890
Hotel and Motel	656,988
Restaurant	625,630
Groceries and Supplies	685,229
Gas	372,863
Shopping	313,008
Equipment Rentals	112,594
Fishing Supplies	312,085
Guide Services	148,788
Other	30,748
Total	3,601,088

Predicted Expenditures by Economic Sector for Fishing, Fly Fishing, Kayaking, and Rafting Visitors

Trade /1	437,053
Eating, Drinking, and Lodging /2	625,630
Hotels, Gaming, and Recreation /3	938,370
Other Final Payments /4	343,156
Imports /5	1,276,879
Total	3,601,088

1/ The Trade sector includes only the mark-up value (25.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

2/ The Eating, Drinking, and Lodging sector includes Restaurant Expenditures.

3/ The Hotels, Gaming, and Recreation sector includes Hotel and Motel, Equipment Rentals, and Guide Services Expenditures.

4/ The Other Final Payments sector includes Camping Fees and License Fees.

5/ The Imports sector includes the Trade sector balance (74.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

No Action Alternative
Reservoir Visitation Calculation

End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservour Storage Levels (af)			
April	13,860	144,130	32,290
May	17,200	153,840	36,350
June	16,310	138,760	37,670
July	14,130	138,840	37,060
August	12,470	136,590	24,380
September	12,060	136,120	21,980
October	6,720	133,050	21,870
Other Months (average)	7,146	136,184	23,286
January	7,040	136,690	22,480
February	7,370	137,620	23,260
March	8,040	138,240	26,020
November	6,530	133,330	22,160
December	6,750	135,040	22,510

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Reservoir Storage Levels			
Level 1	29,840	226,500	40,870
Level 2	26,856	203,850	36,783
Level 3	23,872	181,200	32,696
Level 4	20,888	158,550	28,609
Level 5	17,904	135,900	24,522
Level 6	14,920	113,250	20,435
Level 7	11,936	90,600	16,348
Level 8	8,952	67,950	12,261
Level 9	5,968	45,300	8,174
Level 10	2,984	22,650	4,087
Level 11	0	0	0
Scale Values for Reservoir Storage Levels			
Level 1	11.000000	11.000000	11.000000
Level 2	10.000000	10.000000	10.000000
Level 3	9.000000	9.000000	9.000000
Level 4	8.000000	8.000000	8.000000
Level 5	7.000000	7.000000	7.000000
Level 6	6.000000	6.000000	6.000000
Level 7	5.000000	5.000000	5.000000
Level 8	4.000000	4.000000	4.000000
Level 9	3.000000	3.000000	3.000000
Level 10	2.000000	2.000000	2.000000
Level 11	1.000000	1.000000	1.000000
Slope Coefficient for Scale Value Equation	0.000335	0.000044	0.000245
Constant Term for Scale Value Equation	1.000000	1.000000	1.000000
Scale Values for the End of the Month Reservoir Storage Levels			
April	5.644772	7.363355	8.900661
May	6.764075	7.792053	9.894054
June	6.465818	7.126269	10.217030
July	5.735255	7.129801	10.067776
August	5.178954	7.030464	6.965256
September	5.041555	7.009713	6.378028
October	3.252011	6.874172	6.351113
Other Months	3.394772	7.012539	6.697578

Visitation Response to the End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Visits by Visitor for Reservoir Storage Levels			
Level 1	3.74	3.20	6.22
Level 2	3.74	3.18	6.22
Level 3	3.64	3.09	6.06
Level 4	3.55	2.97	3.59
Level 5	3.34	2.89	3.25
Level 6	3.09	2.71	3.02
Level 7	2.90	2.16	2.68
Level 8	2.57	1.27	2.33
Level 9	1.69	0.73	1.94
Level 10	1.55	0.69	1.76
Level 11	1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels			
Level 1	100.00%	100.00%	100.00%
Level 2	100.00%	99.16%	100.00%
Level 3	97.29%	96.30%	97.40%
Level 4	94.93%	92.61%	57.62%
Level 5	89.36%	90.16%	52.29%
Level 6	82.50%	84.49%	48.56%
Level 7	77.49%	67.52%	43.06%
Level 8	68.64%	39.68%	37.45%
Level 9	45.19%	22.77%	31.12%
Level 10	41.48%	21.65%	28.20%
Level 11	41.48%	20.68%	22.74%
Slope Coefficients for Visitation Equations for Reservoir Storage Levels			
Level 1	0.000000	0.008382	0.000000
Level 2	0.027102	0.028639	0.025964
Level 3	0.023599	0.036846	0.397882
Level 4	0.055678	0.024535	0.053243
Level 5	0.068584	0.056666	0.037347
Level 6	0.050147	0.169737	0.055004
Level 7	0.088496	0.278442	0.056046
Level 8	0.234513	0.169039	0.063362
Level 9	0.037058	0.011176	0.029143
Level 10	0.000000	0.009779	0.054577
Level 11	0.000000	0.000000	0.000000

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Constant Terms for Visitation Equations for Reservoir Storage Levels			
Level 1	1.000000	0.907797	1.000000
Level 2	0.728982	0.705230	0.740364
Level 3	0.760509	0.631363	-2.606888
Level 4	0.503872	0.729852	0.150209
Level 5	0.413532	0.504933	0.261482
Level 6	0.524152	-0.173492	0.155542
Level 7	0.332412	-0.717017	0.150329
Level 8	-0.251659	-0.279403	0.121067
Level 9	0.340708	0.194185	0.223724
Level 10	0.414823	0.196979	0.172857
Level 11	0.414823	0.206758	0.227434
Visitation Response to the End of the Month Reservoir Storage Levels			
April	80.72%	91.05%	93.45%
May	87.74%	92.10%	99.72%
June	85.70%	90.47%	100.00%
July	81.18%	90.48%	100.00%
August	78.39%	90.23%	52.16%
September	77.70%	90.18%	49.97%
October	51.10%	89.45%	49.87%
Other Months	54.45%	90.19%	51.16%
1999 Visitation Response to the End of the Month Reservoir Storage Levels			
April	81.85%	99.33%	98.48%
May	95.30%	99.76%	99.39%
June	100.00%	99.89%	100.00%
July	98.67%	99.41%	100.00%
August	93.84%	99.21%	99.24%
September	80.78%	98.77%	95.33%
October	71.47%	98.63%	55.06%
Other Months	71.17%	99.01%	54.51%
1994 and 1999 Visitors that Visit by Month			
April	44	69	71
May	70	135	138
June	96	217	196
July	116	234	231
August	113	244	226
September	75	152	158
October	47	78	77
Other Months	27	38	39
Total	588	1,167	1,136

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Visitors that Visit by Month			
April	43	63	67
May	64	125	138
June	82	197	196
July	95	213	232
August	94	222	119
September	72	139	83
October	34	71	70
Other Months	21	35	37
Total	506	1,063	941
Weights for the Predicted Visitors that Visit by Month			
April	8.57%	5.95%	7.16%
May	12.73%	11.72%	14.72%
June	16.25%	18.48%	20.83%
July	18.85%	20.03%	24.55%
August	18.64%	20.87%	12.63%
September	14.25%	13.05%	8.80%
October	6.64%	6.65%	7.43%
Other Months	4.08%	3.25%	3.89%
Weighted Scale Value for the End of the Month Reservoir Storage Levels			
April	0.483773	0.437941	0.637430
May	0.860931	0.913238	1.456242
June	1.050574	1.316961	2.128536
July	1.081013	1.427858	2.471984
August	0.965452	1.467151	0.879489
September	0.718274	0.914785	0.561447
October	0.215832	0.457256	0.470791
Other Months	0.138482	0.228243	0.260605
Total	5.514330	7.163433	8.866524
Predicted Visitation Response	80.07%	90.56%	92.09%
1999 Visitation Response	93.61%	99.41%	99.16%
1999 Camping Visitors	13,117	61,592	16,824
Predicted Camping Visitors	11,219	56,110	15,625

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Camping Visitors by Month			
April	961	3,337	1,119
May	1,428	6,576	2,300
June	1,823	10,369	3,255
July	2,315	11,237	3,837
August	2,091	11,709	1,973
September	1,598	7,323	1,375
October	745	3,732	1,158
Other Months	458	1,826	608
Total	11,219	56,110	15,625
Average Group Size of Camping Visitors	4.76	5.68	5.03
Predicted Camping Visitor Groups	2,356	9,877	3,110
1999 Day Use Visitors	7,140	11,912	14,294
Predicted Day Use Visitors	6,106	10,852	13,276
Predicted Day Use Visitors by Month			
April	523	645	951
May	777	1,272	1,954
June	992	2,005	2,766
July	1,151	2,173	3,260
August	1,138	2,265	1,676
September	870	1,416	1,169
October	405	722	984
Other Months	249	353	517
Total	6,106	10,852	13,276
Average Group Size of Day Use Visitors	3.39	3.50	4.90
Predicted Day Use Visitor Groups	1,802	3,101	2,711

Expenditures

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Expenditures by Category for Camping Visitor Groups			
Licenses	8.11	11.71	15.64
Camping Fees	26.13	65.10	32.38
Hotel or Motel	2.61	1.65	5.50
Restaurant	9.61	12.74	8.43
Groceries	68.39	152.65	115.63
Equipment and Supplies	0.00	3.53	0.04
Rental	32.61	9.93	0.08
Fuel	21.32	45.64	30.98
Other	24.86	38.66	43.45
Total	193.63	341.59	252.12
Predicted Expenditures by Category for Camping Visitor Groups			
Licenses	19,108	115,613	48,633
Camping Fees	61,581	643,003	100,671
Hotel or Motel	6,147	16,252	17,101
Restaurant	22,638	125,825	26,199
Groceries	161,152	1,507,684	359,540
Equipment and Supplies	0	34,860	124
Rental	76,841	98,070	238
Fuel	50,239	450,771	96,347
Other	58,579	381,871	135,112
Total	456,285	3,373,949	783,965
1994 and 1999 Average Expenditures by Category for Day Use Visitor Groups			
Licenses	13.97	12.59	8.65
Camping Fees	2.22	0.00	3.55
Hotel or Motel /1	0.33	15.63	13.58
Restaurant	20.56	7.24	9.25
Groceries	20.28	27.28	24.76
Equipment and Supplies	1.50	0.89	2.38
Rental	54.17	0.00	5.10
Fuel	13.78	20.57	23.58
Other	4.44	3.80	4.77
Total	131.24	88.00	95.62

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Category for Day Use Visitor Groups			
Licenses	25,165	39,034	23,450
Camping Fees	4,004	0	9,637
Hotel or Motel 1/	603	48,466	36,814
Restaurant	37,041	22,438	25,075
Groceries	36,541	84,579	67,123
Equipment and Supplies	2,703	2,761	6,440
Rental	97,603	0	13,835
Fuel	24,824	63,789	63,927
Other	8,008	11,790	12,935
Total	236,490	272,857	259,236

1/ Expenditures on hotel or motel include vacation-home rent expenditures.

Summary

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (at)			
April	13,860	144,130	32,290
May	17,200	153,840	36,350
June	16,310	138,760	37,670
July	14,130	138,840	37,060
August	12,470	136,590	24,380
September	12,060	136,120	21,980
October	6,720	133,050	21,870
Other Months (average)	7,146	136,184	23,286
Predicted Camping and Day Use Visitors by Month			
April	1,485	3,983	2,070
May	2,205	7,848	4,254
June	2,815	12,375	6,021
July	3,266	13,410	7,096
August	3,230	13,974	3,649
September	2,468	8,739	2,544
October	1,150	4,454	2,142
Other Months	707	2,179	1,125
Total	17,325	66,962	28,901
Predicted Expenditures by Category for Camping and Day Use Visitors			
Licenses	44,273	154,647	72,083
Camping Fees	65,585	643,003	110,308
Hotel or Motel	6,748	64,718	53,915
Restaurant	59,679	148,263	51,275
Groceries	197,693	1,592,263	426,663
Equipment and Supplies	2,703	37,621	6,564
Rental	174,445	98,070	14,073
Fuel	75,063	514,560	160,273
Other	66,587	393,661	148,047
Total	692,775	3,646,806	1,043,200

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Economic Sector for Camping and Day Use Visitors			
Trade /2	87,222	647,217	189,095
Eating, Drinking, and Lodging /3	59,679	148,263	51,275
Hotels, Gaming, and Recreation /4	181,193	162,788	67,988
Other Final Payments /5	109,858	797,650	182,391
Imports /6	254,824	1,890,888	552,453
Total	692,775	3,646,806	1,043,200

2/ The Trade sector includes only the mark-up value (25.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other

3/ The Eating, Drinking, and Lodging sector includes Expenditures on Restaurant.

4/ The Hotels, Gaming, and Recreation sector includes Expenditures on Hotel or Motel, and Rental.

5/ The Other Final Payments sector includes Expenditures on Licenses and Camping Fees.

6/ The Imports sector includes the Trade sector balance (74.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

No Action Alternative
Economic Impact Calculation

River Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	437,053		
Eating, Drinking, and Lodging	625,630		
Hotels, Gaming, and Recreation	918,370		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	437,053	7	135,234
Eating, Drinking, and Lodging	625,630	18	144,318
Hotels, Gaming, and Recreation	918,370	15	148,145
Total	1,981,053	41	427,697
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,827,435	53	747,311

Reservoir Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	923,533		
Eating, Drinking, and Lodging	259,217		
Hotels, Gaming, and Recreation	411,968		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	923,533	16	285,763
Eating, Drinking, and Lodging	259,217	7	59,795
Hotels, Gaming, and Recreation	411,968	7	66,456
Total	1,594,717	30	412,013
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,058,037	40	648,087

Proposed Action - $12 Million Federal Acquisitions
River Visitation Calculation

Monthly Mean River Flow Levels

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,241
May	1,645
June	1,629
July	622
August	477
September	449
October	457

Visitation Response to Monthly Mean River Flow Levels

April Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	714	1,172	1,741	1,771
All Visitors	17,574	17,356	9,886	12,092
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	15,584	6,555	5,472	8,481
Rafting Visitors	2,695	1,390	1,321	1,459

Predicted April Visitors

All Visitors	16,451
Fishing Visitors	3,041
Fly Fishing Visitors	6,381
Kayaking Visitors	6,424
Rafting Visitors	1,382
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,228

May Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	814	1,421	2,116	2,965
All Visitors	17,574	17,356	12,092	9,886
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	16,344	6,875	8,895	5,739
Rafting Visitors	2,695	1,390	1,459	1,321

Predicted May Visitors

All Visitors	15,660
Fishing Visitors	2,707
Fly Fishing Visitors	5,590
Kayaking Visitors	7,526
Rafting Visitors	1,412
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,235

June Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	691	1,247	1,974	2,138
All Visitors	24,384	24,082	16,778	13,717
Fishing Visitors	4,788	6,985	3,401	3,401
Fly Fishing Visitors	3,953	5,803	2,473	2,473
Kayaking Visitors	6,462	2,718	3,517	2,269
Rafting Visitors	6,589	3,398	3,566	3,230

Predicted June Visitors

All Visitors	20,244
Fishing Visitors	5,102
Fly Fishing Visitors	4,053
Kayaking Visitors	3,138
Rafting Visitors	3,486
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	15,779

July Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	521	553	629	898
All Visitors	27,459	27,120	18,894	15,447
Fishing Visitors	5,985	8,732	4,251	4,251
Fly Fishing Visitors	8,805	12,925	5,508	5,508
Kayaking Visitors	5,321	2,238	2,896	1,868
Rafting Visitors	9,883	5,096	5,348	4,845

Predicted July Visitors

All Visitors	19,652
Fishing Visitors	4,664
Fly Fishing Visitors	6,192
Kayaking Visitors	2,835
Rafting Visitors	5,325
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	19,016

August Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	503	524	568	630
All Visitors	25,482	25,167	17,534	14,334
Fishing Visitors	4,959	7,235	3,522	3,522
Fly Fishing Visitors	7,727	11,342	4,834	4,834
Kayaking Visitors	4,941	2,078	2,689	1,735
Rafting Visitors	7,188	3,707	3,890	3,523

Predicted August Visitors

All Visitors	24,165
Fishing Visitors	4,703
Fly Fishing Visitors	7,328
Kayaking Visitors	4,686
Rafting Visitors	6,816
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	23,532

September Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	488	509	551	617
All Visitors	9,226	9,112	6,348	5,190
Fishing Visitors	1,881	2,744	1,336	1,336
Fly Fishing Visitors	5,391	7,913	3,373	3,373
Kayaking Visitors	760	320	414	267
Rafting Visitors	599	309	324	294

Predicted September Visitors

All Visitors	8,489
Fishing Visitors	1,731
Fly Fishing Visitors	4,960
Kayaking Visitors	699
Rafting Visitors	551
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	7,941

October Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	415	454	480	544
All Visitors	8,787	8,678	4,943	6,046
Fishing Visitors	1,710	2,495	1,215	1,215
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	760	320	267	414
Rafting Visitors	299	154	147	162
Predicted October Visitors				
All Visitors	8,247			
Fishing Visitors	2,347			
Fly Fishing Visitors	6,404			
Kayaking Visitors	314			
Rafting Visitors	154			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	9,218			
Predicted Visitors				
All Visitors	112,908			
Fishing Visitors	24,294			
Fly Fishing Visitors	40,908			
Kayaking Visitors	25,622			
Rafting Visitors	19,125			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	109,949			
Average Visitor Group Size	3.66			
Predicted Visitor Groups				
All Visitor Groups	30,860			
Fishing Visitor Groups	6,640			
Fly Fishing Visitor Groups	11,181			
Kayaking Visitor Groups	7,003			
Rafting Visitor Groups	5,227			
Fishing, Fly Fishing, Kayaking, and Rafting Visitor Groups	30,052			

Expenditures

Average Expenditures by Category for All Visitor Groups

Camping Fees	5.99
License Fees	7.14
Hotel and Motel	22.91
Restaurant	25.43
Groceries and Supplies	27.30
Gas	14.68
Shopping	12.91
Equipment Rentals	4.29
Fishing Supplies	11.18
Guide Services	5.25
Other	1.10
Total	138.18

Predicted Expenditures by Category for All Visitor Groups

Camping Fees	184,992
License Fees	220,261
Hotel and Motel	707,072
Restaurant	784,901
Groceries and Supplies	842,382
Gas	453,069
Shopping	398,470
Equipment Rentals	132,258
Fishing Supplies	345,058
Guide Services	161,931
Other	33,912
Total	4,264,305

Average Expenditures by Category for Fishing Visitor Groups

Camping Fees	9.10
License Fees	13.93
Hotel and Motel	0.00
Restaurant	8.90
Groceries and Supplies	14.64
Gas	9.17
Shopping	10.00
Equipment Rentals	5.24
Fishing Supplies	15.83
Guide Services	0.00
Other	3.33
Total	90.14

Predicted Expenditures by Category for Fishing Visitor Groups

Camping Fees	60,394
License Fees	92,488
Hotel and Motel	0
Restaurant	59,129
Groceries and Supplies	97,231
Gas	60,868
Shopping	66,402
Equipment Rentals	34,782
Fishing Supplies	105,136
Guide Services	0
Other	22,134
Total	598,564

Average Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	4.06
License Fees	8.24
Hotel and Motel	37.20
Restaurant	25.23
Groceries and Supplies	31.52
Gas	12.58
Shopping	9.02
Equipment Rentals	1.97
Fishing Supplies	15.38
Guide Services	7.80
Other	0.00
Total	152.98

Predicted Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	45,402
License Fees	92,158
Hotel and Motel	415,899
Restaurant	282,066
Groceries and Supplies	352,370
Gas	140,609
Shopping	100,798
Equipment Rentals	22,023
Fishing Supplies	171,950
Guide Services	87,246
Other	0
Total	1,710,521

Average Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0.00
License Fees	1.96
Hotel and Motel	0.00
Restaurant	10.00
Groceries and Supplies	9.30
Gas	14.89
Shopping	2.17
Equipment Rentals	2.17
Fishing Supplies	4.35
Guide Services	0.00
Other	0.00
Total	44.85

Predicted Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0
License Fees	13,702
Hotel and Motel	0
Restaurant	70,030
Groceries and Supplies	65,158
Gas	104,284
Shopping	15,224
Equipment Rentals	15,224
Fishing Supplies	30,448
Guide Services	0
Other	0
Total	314,070

Average Expenditures by Category for Rafting Visitor Groups

Camping Fees	5.89
License Fees	0.66
Hotel and Motel	45.13
Restaurant	40.26
Groceries and Supplies	31.45
Gas	12.37
Shopping	24.61
Equipment Rentals	7.63
Fishing Supplies	0.00
Guide Services	11.58
Other	1.58
Total	181.16

Predicted Expenditures by Category for Rafting Visitor Groups

Camping Fees	30,814
License Fees	3,439
Hotel and Motel	235,921
Restaurant	210,471
Groceries and Supplies	164,388
Gas	64,655
Shopping	128,621
Equipment Rentals	39,893
Fishing Supplies	0
Guide Services	60,528
Other	8,254
Total	946,984

Summary

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,241
May	1,645
June	1,629
July	622
August	477
September	449
October	457
Predicted Fishing, Fly Fishing, Kayaking, and Rafting Visitors by Month	
April	17,228
May	17,235
June	15,779
July	19,016
August	23,532
September	7,941
October	9,218
Total	109,949
Predicted Expenditures by Category for Fishing, Fly Fishing, Kayaking, and Rafting Visitors	
Camping Fees	136,610
License Fees	201,787
Hotel and Motel	651,819
Restaurant	621,696
Groceries and Supplies	679,148
Gas	370,416
Shopping	311,045
Equipment Rentals	111,922
Fishing Supplies	307,534
Guide Services	147,773
Other	30,388
Total	3,570,138

Predicted Expenditures by Economic Sector for Fishing, Fly Fishing, Kayaking, and Rafting Visitors

Trade /1	433,125
Eating, Drinking, and Lodging /2	621,696
Hotels, Gaming, and Recreation /3	911,515
Other Final Payments /4	338,397
Imports /5	1,265,405
Total	3,570,138

1/ The Trade sector includes only the mark-up value (25.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

2/ The Eating, Drinking, and Lodging sector includes Restaurant Expenditures.

3/ The Hotels, Gaming, and Recreation sector includes Hotel and Motel, Equipment Rentals, and Guide Services Expenditures.

4/ The Other Final Payments sector includes Camping Fees and License Fees.

5/ The Imports sector includes the Trade sector balance (74.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

Proposed Action - $12 Million Federal Acquisitions
Reservoir Visitation Calculation

End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	13,950	143,970	32,280
May	17,380	154,100	36,350
June	16,530	138,850	37,660
July	14,270	138,460	37,030
August	12,550	135,900	24,320
September	12,130	135,440	21,910
October	6,710	132,560	21,850
Other Months (average)	7,182	135,764	23,266
January	7,090	136,210	22,440
February	7,390	137,100	23,240
March	8,030	138,080	26,020
November	6,580	132,850	22,150
December	6,820	134,580	22,480

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Reservoir Storage Levels			
Level 1	29,840	226,500	40,870
Level 2	26,856	203,850	36,783
Level 3	23,872	181,200	32,696
Level 4	20,888	158,550	28,609
Level 5	17,904	135,900	24,522
Level 6	14,920	113,250	20,435
Level 7	11,936	90,600	16,348
Level 8	8,952	67,950	12,261
Level 9	5,968	45,300	8,174
Level 10	2,984	22,650	4,087
Level 11	0	0	0
Scale Values for Reservoir Storage Levels			
Level 1	11.000000	11.000000	11.000000
Level 2	10.000000	10.000000	10.000000
Level 3	9.000000	9.000000	9.000000
Level 4	8.000000	8.000000	8.000000
Level 5	7.000000	7.000000	7.000000
Level 6	6.000000	6.000000	6.000000
Level 7	5.000000	5.000000	5.000000
Level 8	4.000000	4.000000	4.000000
Level 9	3.000000	3.000000	3.000000
Level 10	2.000000	2.000000	2.000000
Level 11	1.000000	1.000000	1.000000
Slope Coefficient for Scale Value Equation	0.000335	0.000044	0.000245
Constant Term for Scale Value Equation	1.000000	1.000000	1.000000
Scale Values for the End of the Month Reservoir Storage Levels			
April	5.674933	7.356291	8.898214
May	6.824397	7.803532	9.894054
June	6.539544	7.130243	10.214593
July	5.782172	7.113024	10.060436
August	5.205764	7.000000	6.950575
September	5.065013	6.979691	6.360900
October	3.248660	6.852539	6.346220
Other Months	3.406836	6.993996	6.692654

Visitation Response to the End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Visits by Visitor for Reservoir Storage Levels			
Level 1	3.74	3.20	6.22
Level 2	3.74	3.18	6.22
Level 3	3.64	3.09	6.06
Level 4	3.55	2.97	3.59
Level 5	3.34	2.89	3.25
Level 6	3.09	2.71	3.02
Level 7	2.90	2.16	2.68
Level 8	2.57	1.27	2.33
Level 9	1.69	0.73	1.94
Level 10	1.55	0.69	1.76
Level 11	1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels			
Level 1	100.00%	100.00%	100.00%
Level 2	100.00%	99.16%	100.00%
Level 3	97.29%	96.30%	97.40%
Level 4	94.93%	92.61%	57.62%
Level 5	89.36%	90.16%	52.29%
Level 6	82.50%	84.49%	48.56%
Level 7	77.49%	67.52%	43.06%
Level 8	68.64%	39.68%	37.45%
Level 9	45.19%	22.77%	31.12%
Level 10	41.48%	21.65%	28.20%
Level 11	41.48%	20.66%	22.74%
Slope Coefficients for Visitation Equations for Reservoir Storage Levels			
Level 1	0.000000	0.008382	0.000000
Level 2	0.027102	0.028639	0.025964
Level 3	0.023599	0.036846	0.397881
Level 4	0.055678	0.024535	0.053243
Level 5	0.068584	0.056666	0.037347
Level 6	0.050147	0.169737	0.055004
Level 7	0.088496	0.278442	0.056046
Level 8	0.234513	0.169039	0.063362
Level 9	0.037058	0.011176	0.029143
Level 10	0.000000	0.009779	0.054577
Level 11	0.000000	0.000000	0.000000

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Constant Terms for Visitation Equations for Reservoir Storage Levels			
Level 1	1.000000	0.907797	1.000000
Level 2	0.728982	0.705230	0.740364
Level 3	0.760509	0.631363	-2.606888
Level 4	0.503872	0.729852	0.150209
Level 5	0.413532	0.504933	0.261482
Level 6	0.524152	-0.173492	0.155542
Level 7	0.332412	-0.717017	0.150329
Level 8	-0.251659	-0.279403	0.121067
Level 9	0.340708	0.194185	0.223724
Level 10	0.414823	0.196979	0.172857
Level 11	0.414823	0.206758	0.227434
Visitation Response to the End of the Month Reservoir Storage Levels			
April	80.87%	91.03%	93.35%
May	88.16%	92.13%	99.72%
June	86.20%	90.48%	100.00%
July	81.41%	90.44%	100.00%
August	78.52%	90.16%	52.11%
September	77.81%	90.04%	49.90%
October	51.02%	89.32%	49.85%
Other Months	54.73%	90.13%	51.14%
1999 Visitation Response to the End of the Month Reservoir Storage Levels			
April	81.85%	99.33%	98.48%
May	95.30%	99.76%	99.39%
June	100.00%	99.89%	100.00%
July	98.67%	99.41%	100.00%
August	93.84%	99.21%	99.24%
September	80.78%	98.77%	95.33%
October	71.47%	98.63%	55.06%
Other Months	71.17%	99.01%	54.51%
1994 and 1999 Visitors that Visit by Month			
April	44	69	71
May	70	135	138
June	96	217	196
July	116	234	231
August	113	244	226
September	75	152	158
October	47	78	77
Other Months	27	38	39
Total	588	1,167	1,136

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Visitors that Visit by Month			
April	43	63	67
May	65	125	138
June	83	197	196
July	96	213	231
August	95	222	119
September	72	139	83
October	34	71	70
Other Months	21	35	37
Total	508	1,063	940
Weights for the Predicted Visitors that Visit by Month			
April	8.56%	5.95%	7.16%
May	12.75%	11.73%	14.72%
June	16.30%	18.49%	20.84%
July	18.85%	20.03%	24.56%
August	18.62%	20.86%	12.62%
September	14.23%	13.04%	8.79%
October	6.61%	6.65%	7.41%
Other Months	4.09%	3.25%	3.89%
Weighted Scale Value for the End of the Month Reservoir Storage Levels			
April	0.485855	0.437672	0.636820
May	0.870171	0.915353	1.456768
June	1.065720	1.318543	2.128795
July	1.089842	1.424612	2.471074
August	0.969293	1.460365	0.877029
September	0.720611	0.909951	0.559425
October	0.214653	0.455436	0.470426
Other Months	0.139291	0.227598	0.260415
Total	5.555435	7.149530	8.860753
Predicted Visitation Response	80.27%	90.53%	91.86%
1999 Visitation Response	93.61%	99.41%	99.16%
1999 Camping Visitors	13,117	61,592	16,824
Predicted Camping Visitors	11,248	56,089	15,586

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Camping Visitors by Month			
April	963	3,337	1,115
May	1,434	6,579	2,295
June	1,833	10,372	3,248
July	2,120	11,234	3,828
August	2,094	11,701	1,967
September	1,600	7,312	1,371
October	743	3,728	1,155
Other Months	460	1,825	606
Total	11,248	56,089	15,586
Average Group Size of Camping Visitors	4.76	5.68	5.03
Predicted Camping Visitor Groups	2,363	9,873	3,102
1999 Day Use Visitors	7,140	11,912	14,294
Predicted Day Use Visitors	6,122	10,848	13,243
Predicted Day Use Visitors by Month			
April	524	645	948
May	781	1,272	1,950
June	998	2,006	2,760
July	1,154	2,173	3,253
August	1,140	2,263	1,671
September	871	1,414	1,165
October	405	721	982
Other Months	250	353	515
Total	6,122	10,848	13,243
Average Group Size of Day Use Visitors	3.39	3.50	4.90
Predicted Day Use Visitor Groups	1,807	3,099	2,704

Expenditures

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Expenditures by Category for Camping Visitor Groups			
Licenses	8.11	11.71	15.64
Camping Fees	26.13	65.10	32.38
Hotel or Motel	2.61	1.65	5.50
Restaurant	9.61	12.74	8.43
Groceries	68.39	152.65	115.63
Equipment and Supplies	0.00	3.53	0.04
Rental	32.61	9.93	0.08
Fuel	21.32	45.64	30.98
Other	24.86	38.66	43.45
Total	193.63	341.59	252.12
Predicted Expenditures by Category for Camping Visitor Groups			
Licenses	19,157	115,570	48,512
Camping Fees	61,739	642,761	100,420
Hotel or Motel	6,163	16,245	17,058
Restaurant	22,696	125,778	26,134
Groceries	161,567	1,507,116	358,643
Equipment and Supplies	0	34,847	124
Rental	77,039	98,033	237
Fuel	50,368	450,601	96,106
Other	58,730	381,727	134,775
Total	457,459	3,372,678	782,010
1994 and 1999 Average Expenditures by Category for Day Use Visitor Groups			
Licenses	13.97	12.59	8.65
Camping Fees	2.22	0.00	3.55
Hotel or Motel /1	0.33	15.63	13.58
Restaurant	20.56	7.24	9.25
Groceries	20.28	27.28	24.76
Equipment and Supplies	1.50	0.89	2.38
Rental	54.17	0.00	5.10
Fuel	13.78	20.57	23.58
Other	4.44	3.80	4.77
Total	131.24	88.00	95.62

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Category for Day Use Visitor Groups			
Licenses	25,229	39,019	23,391
Camping Fees	4,015	0	9,613
Hotel or Motel /1	602	48,448	36,722
Restaurant	37,137	22,429	25,013
Groceries	36,635	84,547	66,956
Equipment and Supplies	2,710	2,760	6,424
Rental	97,855	0	13,801
Fuel	24,888	63,765	63,767
Other	8,029	11,786	12,903
Total	237,099	272,754	258,589

1/ Expenditures on hotel or motel include vacation-home rent expenditures.

Summary

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	13,950	143,970	32,280
May	17,380	154,100	36,350
June	16,530	138,850	37,660
July	14,270	138,460	37,030
August	12,550	135,900	24,320
September	12,130	135,440	21,910
October	6,710	132,560	21,850
Other Months (average)	7,182	135,764	23,266
Predicted Camping and Day Use Visitors by Month			
April	1,487	3,982	2,063
May	2,215	7,852	4,245
June	2,831	12,378	6,008
July	3,274	13,406	7,061
August	3,234	13,965	3,638
September	2,471	8,727	2,535
October	1,148	4,449	2,137
Other Months	710	2,178	1,122
Total	17,370	66,937	28,829
Predicted Expenditures by Category for Camping and Day Use Visitors			
Licenses	44,387	154,589	71,903
Camping Fees	65,754	642,761	110,033
Hotel or Motel	6,765	64,693	53,780
Restaurant	59,832	148,207	51,147
Groceries	198,202	1,591,663	425,599
Equipment and Supplies	2,710	37,607	6,548
Rental	174,894	98,033	14,038
Fuel	75,256	514,366	159,874
Other	66,759	393,513	147,678
Total	694,558	3,645,432	1,040,599

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Economic Sector for Camping and Day Use Visitors			
Trade /2	87,446	646,973	188,623
Eating, Drinking, and Lodging /3	59,832	148,207	51,147
Hotels, Gaming, and Recreation /4	181,659	162,726	67,818
Other Final Payments /5	110,140	797,350	181,936
Imports /6	255,480	1,890,176	551,075
Total	694,558	3,645,432	1,040,599

2/ The Trade sector includes only the mark-up value (25.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

3/ The Eating, Drinking, and Lodging sector includes Expenditures on Restaurant.

4/ The Hotels, Gaming, and Recreation sector includes Expenditures on Hotel or Motel, and Rental.

5/ The Other Final Payments sector includes Expenditures on Licenses and Camping Fees.

6/ The Imports sector includes the Trade sector balance (74.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

Proposed Action - $12 Million Federal Acquisitions
Economic Impact Calculation

River Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	433,125		
Eating, Drinking, and Lodging	621,696		
Hotels, Gaming, and Recreation	911,515		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	433,125	7	134,019
Eating, Drinking, and Lodging	621,696	18	143,410
Hotels, Gaming, and Recreation	911,515	15	147,039
Total	1,966,336	40	424,469
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,799,069	53	741,733

Reservoir Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	923,042		
Eating, Drinking, and Lodging	259,187		
Hotels, Gaming, and Recreation	412,203		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	923,042	16	285,611
Eating, Drinking, and Lodging	259,187	7	59,788
Hotels, Gaming, and Recreation	412,203	7	66,494
Total	1,594,432	30	411,893
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,057,492	40	647,936

Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million)
River Visitation Calculation

Monthly Mean River Flow Levels

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,237
May	1,641
June	1,621
July	627
August	480
September	451
October	461

Visitation Response to Monthly Mean River Flow Levels

April Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	714	1,172	1,741	1,771
All Visitors	17,574	17,356	9,886	12,092
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	15,584	6,555	5,472	8,481
Rafting Visitors	2,695	1,390	1,321	1,459

Predicted April Visitors

All Visitors	16,503
Fishing Visitors	3,053
Fly Fishing Visitors	6,409
Kayaking Visitors	6,431
Rafting Visitors	1,382
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,275

May Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	814	1,421	2,116	2,965
All Visitors	17,574	17,356	12,092	9,886
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	16,344	6,875	8,395	5,739
Rafting Visitors	2,695	1,390	1,459	1,321

Predicted May Visitors

All Visitors	15,690
Fishing Visitors	2,716
Fly Fishing Visitors	5,612
Kayaking Visitors	7,514
Rafting Visitors	1,412
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,255

June Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	691	1,247	1,974	2,138
All Visitors	24,384	24,082	16,778	13,717
Fishing Visitors	4,788	6,985	3,401	3,401
Fly Fishing Visitors	3,953	5,803	2,473	2,473
Kayaking Visitors	6,462	2,718	3,517	2,269
Rafting Visitors	6,589	3,398	3,566	3,230

Predicted June Visitors

All Visitors	20,325
Fishing Visitors	5,141
Fly Fishing Visitors	4,090
Kayaking Visitors	3,129
Rafting Visitors	3,484
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	15,844

July Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	521	553	629	898
All Visitors	27,459	27,120	18,894	15,447
Fishing Visitors	5,985	8,732	4,251	4,251
Fly Fishing Visitors	8,805	12,925	5,508	5,508
Kayaking Visitors	5,321	2,238	2,896	1,868
Rafting Visitors	9,883	5,096	5,348	4,845

Predicted July Visitors

All Visitors	19,111
Fishing Visitors	4,369
Fly Fishing Visitors	5,704
Kayaking Visitors	2,879
Rafting Visitors	5,342
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	18,293

August Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	503	524	568	630
All Visitors	25,482	25,167	17,534	14,334
Fishing Visitors	4,959	7,235	3,522	3,522
Fly Fishing Visitors	7,727	11,342	4,834	4,834
Kayaking Visitors	4,941	2,078	2,689	1,735
Rafting Visitors	7,188	3,707	3,890	3,523

Predicted August Visitors

All Visitors	24,317
Fishing Visitors	4,733
Fly Fishing Visitors	7,374
Kayaking Visitors	4,715
Rafting Visitors	6,859
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	23,680

September Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	488	509	551	617
All Visitors	9,226	9,112	6,348	5,190
Fishing Visitors	1,881	2,744	1,336	1,336
Fly Fishing Visitors	5,391	7,913	3,373	3,373
Kayaking Visitors	760	320	414	267
Rafting Visitors	599	309	324	294

Predicted September Visitors

All Visitors	8,527
Fishing Visitors	1,738
Fly Fishing Visitors	4,982
Kayaking Visitors	703
Rafting Visitors	554
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	7,977

October Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	415	454	480	544
All Visitors	8,787	8,678	4,943	6,046
Fishing Visitors	1,710	2,495	1,215	1,215
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	760	320	267	414
Rafting Visitors	299	154	147	162
Predicted October Visitors				
All Visitors	7,673			
Fishing Visitors	2,150			
Fly Fishing Visitors	5,799			
Kayaking Visitors	306			
Rafting Visitors	152			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	8,407			
Predicted Visitors				
All Visitors	112,145			
Fishing Visitors	23,901			
Fly Fishing Visitors	39,969			
Kayaking Visitors	25,677			
Rafting Visitors	19,184			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	108,731			
Average Visitor Group Size	3.66			
Predicted Visitor Groups				
All Visitor Groups	30,652			
Fishing Visitor Groups	6,533			
Fly Fishing Visitor Groups	10,925			
Kayaking Visitor Groups	7,018			
Rafting Visitor Groups	5,244			
Fishing, Fly Fishing, Kayaking, and Rafting Visitor Groups	29,719			

Expenditures

Average Expenditures by Category for All Visitor Groups

Camping Fees	5.99
License Fees	7.14
Hotel and Motel	22.91
Restaurant	25.43
Groceries and Supplies	27.30
Gas	14.68
Shopping	12.91
Equipment Rentals	4.29
Fishing Supplies	11.18
Guide Services	5.25
Other	1.10
Total	138.18

Predicted Expenditures by Category for All Visitor Groups

Camping Fees	183,742
License Fees	218,772
Hotel and Motel	702,295
Restaurant	779,598
Groceries and Supplies	836,691
Gas	450,008
Shopping	395,778
Equipment Rentals	131,364
Fishing Supplies	342,727
Guide Services	160,837
Other	33,683
Total	4,235,494

Average Expenditures by Category for Fishing Visitor Groups

Camping Fees	9.10
License Fees	13.93
Hotel and Motel	0.00
Restaurant	8.90
Groceries and Supplies	14.64
Gas	9.17
Shopping	10.00
Equipment Rentals	5.24
Fishing Supplies	15.83
Guide Services	0.00
Other	3.33
Total	90.14

Predicted Expenditures by Category for Fishing Visitor Groups

Camping Fees	59,415
License Fees	90,989
Hotel and Motel	0
Restaurant	58,171
Groceries and Supplies	95,655
Gas	59,882
Shopping	65,326
Equipment Rentals	34,218
Fishing Supplies	103,432
Guide Services	0
Other	21,775
Total	588,864

Average Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	4.06
License Fees	8.24
Hotel and Motel	37.20
Restaurant	25.23
Groceries and Supplies	31.52
Gas	12.58
Shopping	9.02
Equipment Rentals	1.97
Fishing Supplies	15.38
Guide Services	7.80
Other	0.00
Total	152.98

Predicted Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	44,360
License Fees	90,045
Hotel and Motel	406,360
Restaurant	275,596
Groceries and Supplies	344,289
Gas	137,384
Shopping	98,486
Equipment Rentals	21,518
Fishing Supplies	168,006
Guide Services	85,245
Other	0
Total	1,671,289

Average Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0.00
License Fees	1.96
Hotel and Motel.	0.00
Restaurant	10.00
Groceries and Supplies	9.30
Gas	14.89
Shopping	2.17
Equipment Rentals	2.17
Fishing Supplies	4.35
Guide Services	0.00
Other	0.00
Total	44.85

Predicted Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0
License Fees	13,731
Hotel and Motel	0
Restaurant	70,180
Groceries and Supplies	65,298
Gas	104,507
Shopping	15,257
Equipment Rentals	15,257
Fishing Supplies	30,513
Guide Services	0
Other	0
Total	314,743

Average Expenditures by Category for Rafting Visitor Groups

Camping Fees	5.89
License Fees	0.66
Hotel and Motel	45.13
Restaurant	40.26
Groceries and Supplies	31.45
Gas	12.37
Shopping	24.61
Equipment Rentals	7.63
Fishing Supplies	0.00
Guide Services	11.58
Other	1.58
Total	181.16

Predicted Expenditures by Category for Rafting Visitor Groups

Camping Fees	30,909
License Fees	3,450
Hotel and Motel	236,648
Restaurant	211,120
Groceries and Supplies	164,895
Gas	64,854
Shopping	129,018
Equipment Rentals	40,016
Fishing Supplies	0
Guide Services	60,714
Other	8,279
Total	949,903

Summary

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,237
May	1,641
June	1,621
July	627
August	480
September	451
October	461
Predicted Fishing, Fly Fishing, Kayaking, and Rafting Visitors by Month	
April	17,275
May	17,255
June	15,844
July	18,293
August	23,680
September	7,977
October	8,407
Total	108,731
Predicted Expenditures by Category for Fishing, Fly Fishing, Kayaking, and Rafting Visitors	
Camping Fees	134,685
License Fees	198,215
Hotel and Motel	643,008
Restaurant	615,068
Groceries and Supplies	670,137
Gas	366,628
Shopping	308,087
Equipment Rentals	111,009
Fishing Supplies	301,952
Guide Services	145,959
Other	30,054
Total	3,524,799

Predicted Expenditures by Economic Sector for Fishing, Fly Fishing, Kayaking, and Rafting Visitors

Trade /1	427,599
Eating, Drinking, and Lodging /2	615,068
Hotels, Gaming, and Recreation /3	899,976
Other Final Payments /4	332,899
Imports /5	1,249,258
Total	3,524,799

1/ The Trade sector includes only the mark-up value (25.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

2/ The Eating, Drinking, and Lodging sector includes Restaurant Expenditures.

3/ The Hotels, Gaming, and Recreation sector includes Hotel and Motel, Equipment Rentals, and Guide Services Expenditures.

4/ The Other Final Payments sector includes Camping Fees and License Fees.

5/ The Imports sector includes the Trade sector balance (74.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million)
Reservoir Visitation Calculation

End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	14,020	144,840	32,270
May	17,620	154,990	36,350
June	17,010	139,930	37,660
July	14,390	139,600	37,020
August	12,610	136,920	24,310
September	12,190	136,350	21,910
October	6,750	133,390	21,810
Other Months (average)	7,234	136,554	23,182
January	7,160	136,990	22,280
February	7,460	137,900	23,110
March	8,080	138,830	25,920
November	6,610	133,670	22,120
December	6,860	135,380	22,480

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Reservoir Storage Levels			
Level 1	29,840	226,500	40,870
Level 2	26,856	203,850	36,783
Level 3	23,872	181,200	32,696
Level 4	20,888	158,550	28,609
Level 5	17,904	135,900	24,522
Level 6	14,920	113,250	20,435
Level 7	11,936	90,600	16,348
Level 8	8,952	67,950	12,261
Level 9	5,968	45,300	8,174
Level 10	2,984	22,650	4,087
Level 11	0	0	0
Scale Values for Reservoir Storage Levels			
Level 1	11.000000	11.000000	11.000000
Level 2	10.000000	10.000000	10.000000
Level 3	9.000000	9.000000	9.000000
Level 4	8.000000	8.000000	8.000000
Level 5	7.000000	7.000000	7.000000
Level 6	6.000000	6.000000	6.000000
Level 7	5.000000	5.000000	5.000000
Level 8	4.000000	4.000000	4.000000
Level 9	3.000000	3.000000	3.000000
Level 10	2.000000	2.000000	2.000000
Level 11	1.000000	1.000000	1.000000
Slope Coefficient for Scale Value Equation	0.000335	0.000044	0.000245
Constant Term for Scale Value Equation	1.000000	1.000000	1.000000
Scale Values for the End of the Month Reservoir Storage Levels			
April	5.698391	7.394702	8.895767
May	6.904826	7.842826	9.894054
June	6.700402	7.177925	10.214583
July	5.822386	7.163355	10.057989
August	5.225871	7.045033	6.948128
September	5.085121	7.019868	6.360900
October	3.262064	6.889183	6.336433
Other Months	3.424263	7.028874	6.672131

Visitation Response to the End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Visits by Visitor for Reservoir Storage Levels			
Level 1	3.74	3.20	6.22
Level 2	3.74	3.18	6.22
Level 3	3.64	3.09	6.06
Level 4	3.55	2.97	3.59
Level 5	3.34	2.89	3.25
Level 6	3.09	2.71	3.02
Level 7	2.90	2.16	2.68
Level 8	2.57	1.27	2.33
Level 9	1.69	0.73	1.94
Level 10	1.55	0.69	1.76
Level 11	1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels			
Level 1	100.00%	100.00%	100.00%
Level 2	100.00%	99.16%	100.00%
Level 3	97.29%	96.30%	97.40%
Level 4	94.93%	92.61%	57.62%
Level 5	89.36%	90.16%	52.29%
Level 6	82.50%	84.49%	48.56%
Level 7	77.49%	67.52%	43.06%
Level 8	68.64%	39.68%	37.45%
Level 9	45.19%	22.77%	31.12%
Level 10	41.48%	21.65%	28.20%
Level 11	41.48%	20.68%	22.74%
Slope Coefficients for Visitation Equations for Reservoir Storage Levels			
Level 1	0.000000	0.008382	0.000000
Level 2	0.027102	0.028639	0.025964
Level 3	0.023599	0.036846	0.397881
Level 4	0.055678	0.024535	0.053243
Level 5	0.068584	0.056666	0.037347
Level 6	0.050147	0.169737	0.055004
Level 7	0.088496	0.278442	0.056046
Level 8	0.234513	0.169039	0.063362
Level 9	0.037058	0.011176	0.029143
Level 10	0.000000	0.009779	0.054577
Level 11	0.000000	0.000000	0.000000

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Constant Terms for Visitation Equations for Reservoir Storage Levels			
Level 1	1.000000	0.907797	1.000000
Level 2	0.726982	0.705230	0.740364
Level 3	0.760509	0.631363	-2.606888
Level 4	0.503872	0.729852	0.150209
Level 5	0.413532	0.504933	0.261482
Level 6	0.524152	-0.173492	0.155542
Level 7	0.332412	-0.717017	0.150329
Level 8	-0.251659	-0.279403	0.121067
Level 9	0.340708	0.194185	0.223724
Level 10	0.414823	0.196979	0.172857
Level 11	0.414823	0.206758	0.227434
Visitation Response to the End of the Month Reservoir Storage Levels			
April	80.99%	91.13%	93.26%
May	88.71%	92.23%	99.72%
June	87.31%	90.60%	100.00%
July	81.61%	90.56%	100.00%
August	78.62%	90.27%	52.10%
September	77.92%	90.21%	49.90%
October	51.33%	89.53%	49.81%
Other Months	55.14%	90.23%	51.07%
1999 Visitation Response to the End of the Month Reservoir Storage Levels			
April	81.85%	99.33%	98.48%
May	95.30%	99.76%	99.39%
June	100.00%	99.89%	100.00%
July	98.67%	99.41%	100.00%
August	93.84%	99.21%	99.24%
September	80.78%	98.77%	95.33%
October	71.47%	98.63%	55.06%
Other Months	71.17%	99.01%	54.51%
1994 and 1999 Visitors that Visit by Month			
April	44	69	71
May	70	135	138
June	96	217	196
July	116	234	231
August	113	244	226
September	75	152	158
October	47	78	77
Other Months	27	38	39
Total	588	1,167	1,136

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Visitors that Visit by Month			
April	44	63	67
May	65	125	138
June	84	197	196
July	96	213	231
August	95	222	119
September	72	139	83
October	34	71	70
Other Months	21	35	37
Total	510	1,064	940
Weights for the Predicted Visitors that Visit by Month			
April	8.53%	5.95%	7.15%
May	12.77%	11.73%	14.73%
June	16.43%	18.49%	20.85%
July	18.81%	20.03%	24.57%
August	18.56%	20.86%	12.62%
September	14.18%	13.04%	8.80%
October	6.62%	6.65%	7.41%
Other Months	4.10%	3.25%	3.89%
Weighted Scale Value for the End of the Month Reservoir Storage Levels			
April	0.486331	0.439804	0.636115
May	0.881869	0.919654	1.457073
June	1.100833	1.327242	2.129241
July	1.095091	1.434669	2.470991
August	0.969814	1.469531	0.876750
September	0.721084	0.915589	0.559542
October	0.215871	0.458302	0.469454
Other Months	0.140401	0.228683	0.259280
Total	5.611295	7.193473	8.858447
Predicted Visitation Response	80.55%	90.63%	91.77%
1999 Visitation Response	93.61%	99.41%	99.16%
1999 Camping Visitors	13,117	61,592	16,824
Predicted Camping Visitors	11,287	56,156	15,571

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Camping Visitors by Month			
April	963	3,340	1,113
May	1,442	6,585	2,293
June	1,854	10,384	3,246
July	2,123	11,247	3,825
August	2,095	11,714	1,965
September	1,601	7,324	1,370
October	747	3,736	1,154
Other Months	463	1,827	605
Total	11,287	56,156	15,571
Average Group Size of Camping Visitors	4.76	5.68	5.03
Predicted Camping Visitor Groups	2,371	9,885	3,099
1999 Day Use Visitors	7,140	11,912	14,294
Predicted Day Use Visitors	6,144	10,861	13,230
Predicted Day Use Visitors by Month			
April	524	646	946
May	785	1,274	1,948
June	1,009	2,008	2,758
July	1,155	2,175	3,250
August	1,140	2,265	1,669
September	871	1,417	1,164
October	407	723	980
Other Months	252	353	514
Total	6,144	10,861	13,230
Average Group Size of Day Use Visitors	3.39	3.50	4.90
Predicted Day Use Visitor Groups	1,813	3,103	2,702

Expenditures

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Expenditures by Category for Camping Visitor Groups			
Licenses	8.11	11.71	15.64
Camping Fees	26.13	65.10	32.38
Hotel or Motel	2.61	1.65	5.50
Restaurant	9.61	12.74	8.43
Groceries	68.39	152.65	115.63
Equipment and Supplies	0.00	3.53	0.04
Rental	32.61	9.93	0.08
Fuel	21.32	45.64	30.98
Other	24.86	38.66	43.45
Total	193.63	341.59	252.12
Predicted Expenditures by Category for Camping Visitor Groups			
Licenses	19,224	115,708	48,463
Camping Fees	61,955	643,526	100,320
Hotel or Motel	6,185	16,265	17,041
Restaurant	22,775	125,928	26,108
Groceries	162,131	1,508,911	358,285
Equipment and Supplies	0	34,688	124
Rental	77,308	98,150	237
Fuel	50,544	451,138	96,010
Other	58,935	382,182	134,641
Total	459,056	3,376,695	781,229
1994 and 1999 Average Expenditures by Category for Day Use Visitor Groups			
Licenses	13.97	12.59	8.65
Camping Fees	2.22	0.00	3.55
Hotel or Motel /1	0.33	15.63	13.58
Restaurant	20.56	7.24	9.25
Groceries	20.28	27.28	24.76
Equipment and Supplies	1.50	0.89	2.38
Rental	54.17	0.00	5.10
Fuel	13.78	20.57	23.58
Other	4.44	3.80	4.77
Total	131.24	88.00	95.62

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Category for Day Use Visitor Groups			
Licenses	25,317	39,066	23,368
Camping Fees	4,029	0	9,603
Hotel or Motel /1	604	48,505	36,685
Restaurant	37,266	22,456	24,988
Groceries	36,763	84,648	66,889
Equipment and Supplies	2,719	2,763	6,417
Rental	98,196	0	13,787
Fuel	24,975	63,841	63,704
Other	8,057	11,800	12,890
Total	237,926	273,079	258,331

1/ Expenditures on hotel or motel include vacation-home rent expenditures.

Summary

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	14,020	144,840	32,270
May	17,620	154,990	36,350
June	17,010	139,930	37,660
July	14,390	139,600	37,020
August	12,610	136,920	24,310
September	12,190	136,350	21,910
October	6,750	133,390	21,810
Other Months (average)	7,234	136,554	23,182
Predicted Camping and Day Use Visitors by Month			
April	1,488	3,986	2,059
May	2,226	7,858	4,241
June	2,864	12,392	6,004
July	3,278	13,422	7,076
August	3,235	13,979	3,634
September	2,472	8,741	2,533
October	1,153	4,458	2,134
Other Months	715	2,180	1,119
Total	17,431	67,016	28,801
Predicted Expenditures by Category for Camping and Day Use Visitors			
Licenses	44,541	154,773	71,831
Camping Fees	65,983	643,526	109,923
Hotel or Motel	6,789	64,770	53,726
Restaurant	60,041	148,384	51,096
Groceries	198,893	1,593,559	425,174
Equipment and Supplies	2,719	37,651	6,541
Rental	175,504	98,150	14,024
Fuel	75,519	514,979	159,714
Other	66,992	393,981	147,531
Total	696,982	3,649,774	1,039,560

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Economic Sector for Camping and Day Use Visitors			
Trade /2	87,751	647,743	188,435
Eating, Drinking, and Lodging /3	60,041	148,384	51,096
Hotels, Gaming, and Recreation /4	182,293	162,920	67,750
Other Final Payments /5	110,525	798,299	181,754
Imports /6	256,372	1,892,427	550,525
Total	696,982	3,649,774	1,039,560

2/ The Trade sector includes only the mark-up value (25.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

3/ The Eating, Drinking, and Lodging sector includes Expenditures on Restaurant

4/ The Hotels, Gaming, and Recreation sector includes Expenditures on Hotel or Motel, and Rental.

5/ The Other Final Payments sector includes Expenditures on Licenses and Camping Fees.

6/ The Imports sector includes the Trade sector balance (74.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

Combined Federal and Truckee Meadows Communities Acquisitions ($24 Million)
Economic Impact Calculation

River Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	427,599		
Eating, Drinking, and Lodging	615,068		
Hotels, Gaming, and Recreation	899,976		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	427,599	7	132,309
Eating, Drinking, and Lodging	615,068	17	141,881
Hotels, Gaming, and Recreation	899,976	15	145,178
Total	1,942,642	40	419,368
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,753,373	52	732,820

Reservoir Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	923,930		
Eating, Drinking, and Lodging	259,521		
Hotels, Gaming, and Recreation	412,963		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	923,930	16	285,885
Eating, Drinking, and Lodging	259,521	7	59,865
Hotels, Gaming, and Recreation	412,963	7	66,616
Total	1,596,414	30	412,367
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,061,293	40	648,713

Cumulative Effects
River Visitation Calculation

Monthly Mean River Flow Levels

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,256
May	1,647
June	1,620
July	618
August	473
September	419
October	410

Visitation Response to Monthly Mean River Flow Levels

April Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	714	1,372	1,741	1,771
All Visitors	17,574	17,356	9,886	12,092
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	15,584	6,555	5,472	8,481
Rafting Visitors	2,695	1,390	1,321	1,459

Predicted April Visitors

All Visitors	16,254
Fishing Visitors	2,997
Fly Fishing Visitors	6,277
Kayaking Visitors	6,395
Rafting Visitors	1,380
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,050

May Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	814	1,421	2,116	2,965
All Visitors	17,574	17,356	12,092	9,886
Fishing Visitors	2,223	3,243	1,579	1,579
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	16,344	6,875	8,895	5,739
Rafting Visitors	2,695	1,390	1,459	1,321

Predicted May Visitors

All Visitors	15,645
Fishing Visitors	2,702
Fly Fishing Visitors	5,578
Kayaking Visitors	7,532
Rafting Visitors	1,412
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	17,225

June Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	691	1,247	1,974	2,138
All Visitors	24,384	24,082	16,778	15,717
Fishing Visitors	4,788	6,985	3,401	3,401
Fly Fishing Visitors	3,953	5,803	2,473	2,473
Kayaking Visitors	6,462	2,718	3,517	2,269
Rafting Visitors	6,589	3,398	3,566	3,210

Predicted June Visitors

All Visitors	20,335
Fishing Visitors	5,146
Fly Fishing Visitors	4,095
Kayaking Visitors	3,128
Rafting Visitors	3,484
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	15,852

July Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	521	553	629	898
All Visitors	27,459	27,120	18,894	15,447
Fishing Visitors	5,985	8,732	4,251	4,251
Fly Fishing Visitors	8,805	12,925	5,508	5,508
Kayaking Visitors	5,321	2,238	2,896	1,866
Rafting Visitors	9,883	5,096	5,348	4,845

Predicted July Visitors

All Visitors	20,085
Fishing Visitors	4,899
Fly Fishing Visitors	6,582
Kayaking Visitors	2,801
Rafting Visitors	5,312
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	19,594

August Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	503	524	568	630
All Visitors	25,482	25,167	17,534	14,334
Fishing Visitors	4,959	7,235	3,522	3,522
Fly Fishing Visitors	7,727	11,342	4,834	4,834
Kayaking Visitors	4,941	2,078	2,689	1,735
Rafting Visitors	7,188	3,707	3,890	3,523

Predicted August Visitors

All Visitors	23,962
Fishing Visitors	4,664
Fly Fishing Visitors	7,266
Kayaking Visitors	4,646
Rafting Visitors	6,759
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	23,335

September Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	Higher Flow	1999 Flow
	488	509	551	617
All Visitors	9,226	9,112	6,348	5,190
Fishing Visitors	1,881	2,744	1,336	1,336
Fly Fishing Visitors	5,391	7,913	3,373	3,373
Kayaking Visitors	760	320	414	267
Rafting Visitors	599	309	324	294

Predicted September Visitors

All Visitors	7,922
Fishing Visitors	1,615
Fly Fishing Visitors	4,629
Kayaking Visitors	653
Rafting Visitors	514
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	7,411

October Visitation Response to Monthly Mean River Flow Level

	Flow Range (cfs)			
	Higher Minimum Flow	More Consistent Flow	1999 Flow	Higher Flow
	415	454	480	544
All Visitors	8,787	8,678	4,943	6,046
Fishing Visitors	1,710	2,495	1,215	1,215
Fly Fishing Visitors	4,672	6,858	2,923	2,923
Kayaking Visitors	760	320	267	414
Rafting Visitors	299	154	147	162
Predicted October Visitors				
All Visitors	8,681			
Fishing Visitors	1,690			
Fly Fishing Visitors	4,616			
Kayaking Visitors	751			
Rafting Visitors	296			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	7,352			
Predicted Visitors				
All Visitors	112,883			
Fishing Visitors	23,713			
Fly Fishing Visitors	39,043			
Kayaking Visitors	25,906			
Rafting Visitors	19,157			
Fishing, Fly Fishing, Kayaking, and Rafting Visitors	107,819			
Average Visitor Group Size	3.66			
Predicted Visitor Groups				
All Visitor Groups	30,853			
Fishing Visitor Groups	6,481			
Fly Fishing Visitor Groups	10,671			
Kayaking Visitor Groups	7,081			
Rafting Visitor Groups	5,236			
Fishing, Fly Fishing, Kayaking, and Rafting Visitor Groups	29,469			

Expenditures

Average Expenditures by Category for All Visitor Groups

Camping Fees	5.99
License Fees	7.14
Hotel and Motel	22.91
Restaurant	25.43
Groceries and Supplies	27.30
Gas	14.68
Shopping	12.91
Equipment Rentals	4.29
Fishing Supplies	11.18
Guide Services	5.25
Other	1.10
Total	138.18

Predicted Expenditures by Category for All Visitor Groups

Camping Fees	184,951
License Fees	220,212
Hotel and Motel	706,917
Restaurant	784,729
Groceries and Supplies	842,198
Gas	452,969
Shopping	398,383
Equipment Rentals	132,229
Fishing Supplies	344,982
Guide Services	161,896
Other	33,905
Total	4,263,371

Average Expenditures by Category for Fishing Visitor Groups

Camping Fees	9.10
License Fees	13.93
Hotel and Motel	0.00
Restaurant	8.90
Groceries and Supplies	14.64
Gas	9.17
Shopping	10.00
Equipment Rentals	5.24
Fishing Supplies	15.83
Guide Services	0.00
Other	3.33
Total	90.14

Predicted Expenditures by Category for Fishing Visitor Groups

Camping Fees	58,949
License Fees	90,276
Hotel and Motel	0
Restaurant	57,715
Groceries and Supplies	94,906
Gas	59,412
Shopping	64,814
Equipment Rentals	33,950
Fishing Supplies	102,621
Guide Services	0
Other	21,605
Total	584,248

Average Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	4.06
License Fees	8.24
Hotel and Motel	37.20
Restaurant	25.23
Groceries and Supplies	31.52
Gas	12.58
Shopping	9.02
Equipment Rentals	1.97
Fishing Supplies	15.38
Guide Services	7.80
Other	0.00
Total	152.98

Predicted Expenditures by Category for Fly Fishing Visitor Groups

Camping Fees	43,332
License Fees	87,958
Hotel and Motel	396,942
Restaurant	269,209
Groceries and Supplies	336,309
Gas	134,200
Shopping	96,204
Equipment Rentals	21,019
Fishing Supplies	164,112
Guide Services	83,269
Other	0
Total	1,632,555

Average Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0.00
License Fees	1.96
Hotel and Motel	0.00
Restaurant	10.00
Groceries and Supplies	9.30
Gas	14.89
Shopping	2.17
Equipment Rentals	2.17
Fishing Supplies	4.35
Guide Services	0.00
Other	0.00
Total	44.85

Predicted Expenditures by Category for Kayaking Visitor Groups

Camping Fees	0
License Fees	13,853
Hotel and Motel	0
Restaurant	70,807
Groceries and Supplies	65,881
Gas	105,440
Shopping	15,393
Equipment Rentals	15,393
Fishing Supplies	30,785
Guide Services	0
Other	0
Total	317,552

Average Expenditures by Category for Rafting Visitor Groups

Camping Fees	5.89
License Fees	0.66
Hotel and Motel	45.13
Restaurant	40.26
Groceries and Supplies	31.45
Gas	12.37
Shopping	24.61
Equipment Rentals	7.63
Fishing Supplies	0.00
Guide Services	11.58
Other	1.58
Total	181.16

Predicted Expenditures by Category for Rafting Visitor Groups

Camping Fees	30,865
License Fees	3,445
Hotel and Motel	236,308
Restaurant	210,817
Groceries and Supplies	164,658
Gas	64,761
Shopping	128,833
Equipment Rentals	39,959
Fishing Supplies	0
Guide Services	60,627
Other	8,267
Total	948,538

Summary

	Truckee River at Farad, California
Monthly Mean River Flow Levels (cfs)	
April	1,256
May	1,647
June	1,620
July	618
August	473
September	419
October	410
Predicted Fishing, Fly Fishing, Kayaking, and Rafting Visitors by Month	
April	17,050
May	17,225
June	15,852
July	19,594
August	23,335
September	7,411
October	7,352
Total	107,819
Predicted Expenditures by Category for Fishing, Fly Fishing, Kayaking, and Rafting Visitors	
Camping Fees	133,146
License Fees	195,532
Hotel and Motel	633,250
Restaurant	608,547
Groceries and Supplies	661,753
Gas	363,814
Shopping	305,243
Equipment Rentals	110,321
Fishing Supplies	297,519
Guide Services	143,896
Other	29,872
Total	3,482,893

Predicted Expenditures by Economic Sector for Fishing, Fly Fishing, Kayaking, and Rafting Visitors

Trade /1	422,841
Eating, Drinking, and Lodging /2	608,547
Hotels, Gaming, and Recreation /3	887,466
Other Final Payments /4	328,678
Imports /5	1,235,360
Total	3,482,893

1/ The Trade sector includes only the mark-up value (25.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

2/ The Eating, Drinking, and Lodging sector includes Restaurant Expenditures.

3/ The Hotels, Gaming, and Recreation sector includes Hotel and Motel, Equipment Rentals, and Guide Services Expenditures.

4/ The Other Final Payments sector includes Camping Fees and License Fees.

5/ The Imports sector includes the Trade sector balance (74.5%) of Groceries and Supplies, Gas, Shopping, Fishing Supplies, and Other Expenditures.

Cumulative Effects
Reservoir Visitation Calculation

End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	14,940	171,910	33,750
May	19,390	182,760	36,870
June	19,990	168,630	38,090
July	20,090	167,580	37,450
August	18,670	164,100	26,290
September	15,380	161,540	25,300
October	9,060	158,960	24,860
Other Months (average)	8,672	162,470	26,694
January	8,590	162,500	26,310
February	8,700	164,560	26,470
March	9,150	165,610	29,170
November	8,560	158,990	25,390
December	8,360	160,690	26,130

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Reservoir Storage Levels			
Level 1	29,840	226,500	40,870
Level 2	26,856	203,850	36,783
Level 3	23,872	181,200	32,696
Level 4	20,888	158,550	28,609
Level 5	17,904	135,900	24,522
Level 6	14,920	113,250	20,435
Level 7	11,936	90,600	16,348
Level 8	8,952	67,950	12,261
Level 9	5,968	45,300	8,174
Level 10	2,984	22,650	4,087
Level 11	0	0	0
Scale Values for Reservoir Storage Levels			
Level 1	11.000000	11.000000	11.000000
Level 2	10.000000	10.000000	10.000000
Level 3	9.000000	9.000000	9.000000
Level 4	8.000000	8.000000	8.000000
Level 5	7.000000	7.000000	7.000000
Level 6	6.000000	6.000000	6.000000
Level 7	5.000000	5.000000	5.000000
Level 8	4.000000	4.000000	4.000000
Level 9	3.000000	3.000000	3.000000
Level 10	2.000000	2.000000	2.000000
Level 11	1.000000	1.000000	1.000000
Slope Coefficient for Scale Value Equation	0.000335	0.000044	0.000245
Constant Term for Scale Value Equation	1.000000	1.000000	1.000000
Scale Values for the End of the Month Reservoir Storage Levels			
April	6.006702	8.589845	9.257891
May	7.497989	9.068874	10.021287
June	7.699062	8.445033	10.319794
July	7.732574	8.398675	10.163200
August	7.256702	8.245033	7.432591
September	6.154155	8.132009	7.190360
October	4.036193	8.018102	7.082701
Other Months	3.906166	8.173068	7.531441

Visitation Response to the End of the Month Reservoir Storage Levels

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Visits by Visitor for Reservoir Storage Levels			
Level 1	3.74	3.20	6.22
Level 2	3.74	3.18	6.22
Level 3	3.64	3.09	6.06
Level 4	3.55	2.97	3.59
Level 5	3.34	2.89	3.25
Level 6	3.09	2.71	3.02
Level 7	2.90	2.16	2.68
Level 8	2.57	1.27	2.33
Level 9	1.69	0.73	1.94
Level 10	1.55	0.69	1.76
Level 11	1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels			
Level 1	100.00%	100.00%	100.00%
Level 2	100.00%	99.16%	100.00%
Level 3	97.29%	96.30%	97.40%
Level 4	94.93%	92.61%	57.62%
Level 5	89.36%	90.16%	52.29%
Level 6	82.50%	84.49%	48.56%
Level 7	77.49%	67.52%	43.06%
Level 8	68.64%	39.68%	37.45%
Level 9	45.19%	22.77%	31.12%
Level 10	41.48%	21.65%	28.20%
Level 11	41.48%	20.68%	22.74%
Slope Coefficients for Visitation Equations for Reservoir Storage Levels			
Level 1	0.000000	0.008382	0.000000
Level 2	0.027102	0.028639	0.025964
Level 3	0.023599	0.036846	0.397881
Level 4	0.055678	0.024535	0.053243
Level 5	0.068584	0.056666	0.037347
Level 6	0.050147	0.169737	0.055004
Level 7	0.088496	0.278442	0.056046
Level 8	0.234513	0.169039	0.063362
Level 9	0.037058	0.011176	0.029143
Level 10	0.000000	0.009779	0.054577
Level 11	0.000000	0.000000	0.000000

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Constant Terms for Visitation Equations for Reservoir Storage Levels			
Level 1	1.000000	0.907797	1.000000
Level 2	0.728982	0.705230	0.740364
Level 3	0.760509	0.631363	-2.606888
Level 4	0.503872	0.729852	0.150209
Level 5	0.413532	0.504933	0.261482
Level 6	0.524152	-0.173492	0.155542
Level 7	0.332412	-0.717017	0.150329
Level 8	-0.251659	-0.279403	0.121067
Level 9	0.340708	0.194185	0.223724
Level 10	0.414823	0.196979	0.172857
Level 11	0.414823	0.206758	0.227434
Visitation Response to the End of the Month Reservoir Storage Levels			
April	82.55%	94.79%	98.07%
May	92.13%	96.50%	100.00%
June	93.25%	94.25%	100.00%
July	93.44%	94.08%	100.00%
August	90.79%	93.52%	54.59%
September	83.56%	93.10%	53.30%
October	68.96%	92.68%	52.73%
Other Months	66.44%	93.25%	55.12%
1999 Visitation Response to the End of the Month Reservoir Storage Levels			
April	81.85%	99.33%	98.48%
May	95.30%	99.76%	99.39%
June	100.00%	99.89%	100.00%
July	98.67%	99.41%	100.00%
August	93.84%	99.21%	99.24%
September	80.78%	98.77%	95.33%
October	71.47%	98.63%	55.06%
Other Months	71.17%	99.01%	54.51%
1994 and 1999 Visitors that Visit by Month			
April	44	69	71
May	70	135	138
June	96	217	196
July	116	234	231
August	113	244	226
September	75	152	158
October	47	78	77
Other Months	27	38	39
Total	588	1,167	1,136

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Visitors that Visit by Month			
April	44	66	71
May	68	131	139
June	90	205	196
July	110	221	231
August	109	230	124
September	78	143	88
October	45	73	74
Other Months	25	36	39
Total	569	1,105	962
Weights for the Predicted Visitors that Visit by Month			
April	7.80%	5.96%	7.35%
May	11.90%	11.82%	14.43%
June	15.74%	18.53%	20.37%
July	19.31%	20.04%	24.00%
August	19.22%	20.81%	12.92%
September	13.64%	12.97%	9.18%
October	7.97%	6.63%	7.66%
Other Months	4.43%	3.24%	4.10%
Weighted Scale Value for the End of the Month Reservoir Storage Levels			
April	0.468555	0.511857	0.680173
May	0.891903	1.071715	1.445807
June	1.211557	1.564831	2.101642
July	1.493202	1.683233	2.439350
August	1.394566	1.716167	0.960205
September	0.839263	1.054386	0.660049
October	0.321761	0.531856	0.542699
Other Months	0.173060	0.264705	0.308634
Total	6.793866	8.398751	9.138559
Predicted Visitation Response	87.95%	94.08%	97.76%
1999 Visitation Response	93.61%	99.41%	99.16%
1999 Camping Visitors	13,117	61,592	16,824
Predicted Camping Visitors	12,323	58,292	16,58[illegible]

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Camping Visitors by Month			
April	961	3,474	1,219
May	1,466	6,889	2,393
June	1,939	10,801	3,378
July	2,350	11,683	3,981
August	2,368	12,133	2,143
September	1,681	7,558	1,523
October	982	3,867	1,271
Other Months	546	1,888	680
Total	12,323	58,292	16,587
Average Group Size of Camping Visitors	4.76	5.68	5.03
Predicted Camping Visitor Groups	2,588	10,261	3,301
1999 Day Use Visitors	7,140	11,912	14,294
Predicted Day Use Visitors	6,707	11,274	14,094
Predicted Day Use Visitors by Month			
April	523	672	1,025
May	798	1,332	2,033
June	1,056	2,089	2,870
July	1,295	2,259	3,383
August	1,289	2,347	1,821
September	915	1,462	1,294
October	535	748	1,090
Other Months	297	365	578
Total	6,707	11,274	14,094
Average Group Size of Day Use Visitors	3.39	3.50	4.90
Predicted Day Use Visitor Groups	1,979	3,221	2,878

Expenditures

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
1994 and 1999 Average Expenditures by Category for Camping Visitor Groups			
Licenses	8.11	11.71	15.64
Camping Fees	26.13	65.10	32.38
Hotel or Motel	2.61	1.65	5.50
Restaurant	9.61	12.74	8.43
Groceries	68.39	152.65	115.63
Equipment and Supplies	0.00	3.53	0.04
Rental	32.61	9.93	0.08
Fuel	21.32	45.64	30.98
Other	24.86	38.66	43.45
Total	193.63	341.59	252.12
Predicted Expenditures by Category for Camping Visitor Groups			
Licenses	20,988	120,109	51,627
Camping Fees	67,641	668,008	106,870
Hotel or Motel	6,752	16,884	18,154
Restaurant	24,865	130,718	27,812
Groceries	177,012	1,566,316	381,678
Equipment and Supplies	0	36,215	132
Rental	84,404	101,884	253
Fuel	55,183	468,301	102,279
Other	64,344	396,721	143,432
Total	501,191	3,505,157	832,236
1994 and 1999 Average Expenditures by Category for Day Use Visitor Groups			
Licenses	13.97	12.59	8.65
Camping Fees	2.22	0.00	3.55
Hotel or Motel /1	0.33	15.63	13.58
Restaurant	20.56	7.24	9.25
Groceries	20.28	27.28	24.76
Equipment and Supplies	1.50	0.89	2.38
Rental	54.17	0.00	5.10
Fuel	13.78	20.57	23.53
Other	4.44	3.80	4.77
Total	131.24	88.00	95.62

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Category for Day Use Visitor Groups			
Licenses	27,641	40,552	24,894
Camping Fees	4,398	0	10,230
Hotel or Motel /1	660	50,351	39,082
Restaurant	40,687	23,311	26,619
Groceries	40,137	87,868	71,256
Equipment and Supplies	2,969	2,868	6,836
Rental	107,209	0	14,687
Fuel	27,267	66,270	67,863
Other	8,797	12,249	13,732
Total	259,765	283,468	275,198

1/ Expenditures on hotel or motel include vacation-home rent expenditures.

Summary

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
End of the Month Reservoir Storage Levels (af)			
April	14,940	171,910	33,750
May	19,390	152,760	36,870
June	19,990	168,630	38,090
July	20,090	167,580	37,450
August	18,670	164,100	26,290
September	15,380	161,540	25,300
October	9,060	158,960	24,860
Other Months (average)	8,672	162,470	26,694
Predicted Camping and Day Use Visitors by Month			
April	1,484	4,145	2,254
May	2,264	8,221	4,426
June	2,995	12,890	6,248
July	3,675	13,942	7,364
August	3,657	14,480	3,964
September	2,595	9,020	2,816
October	1,517	4,614	2,351
Other Months	843	2,253	1,257
Total	19,030	69,566	30,681
Predicted Expenditures by Category for Camping and Day Use Visitors			
Licenses	48,630	160,661	76,523
Camping Fees	72,040	668,008	117,100
Hotel or Motel	7,412	67,234	57,234
Restaurant	65,552	154,029	54,432
Groceries	217,149	1,654,184	452,934
Equipment and Supplies	2,969	39,084	6,968
Rental	191,613	101,884	14,940
Fuel	82,451	534,570	170,142
Other	73,141	408,970	157,163
Total	760,957	3,788,624	1,107,434

	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Predicted Expenditures by Economic Sector for Camping and Day Use Visitors			
Trade /2	95,806	672,386	200,738
Eating, Drinking, and Lodging /3	65,552	154,029	54,432
Hotels, Gaming, and Recreation /4	199,025	169,118	72,374
Other Final Payments /5	120,670	828,670	193,621
Imports /6	279,904	1,964,422	586,469
Total	760,957	3,788,624	1,107,434

2/ The Trade sector includes only the mark-up value (25.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

3/ The Eating, Drinking, and Lodging sector includes Expenditures on Restaurant.

4/ The Hotels, Gaming, and Recreation sector includes Expenditures on Hotel or Motel, and Rental.

5/ The Other Final Payments sector includes Expenditures on Licenses and Camping Fees.

6/ The Imports sector includes the Trade sector balance (74.5%) from Expenditures on Groceries, Equipment and Supplies, Fuel, and Other.

Cumulative Effects
Economic Impact Calculation

River Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	422,841		
Eating, Drinking, and Lodging	608,547		
Hotels, Gaming, and Recreation	887,466		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	422,841	7	130,837
Eating, Drinking, and Lodging	608,547	17	140,377
Hotels, Gaming, and Recreation	887,466	15	143,160
Total	1,918,855	39	414,374
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,707,511	52	723,969

Reservoir Visitation

	Output	Employment	Income
Predicted Expenditures by Economic Sector			
Trade	968,930		
Eating, Drinking, and Lodging	274,013		
Hotels, Gaming, and Recreation	440,317		
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotels, Gaming, and Recreation	1.000000	0.000017	0.161313
Direct Economic Impact by Economic Sector			
Trade	968,930	17	299,810
Eating, Drinking, and Lodging	274,013	8	63,208
Hotels, Gaming, and Recreation	440,317	7	71,029
Total	1,683,260	32	434,047
Multipliers by Economic Sector			
Trade	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging	1.997225	1.250850	1.732544
Hotels, Gaming, and Recreation	1.901725	1.382270	2.053209
Total Economic Impact	3,227,862	42	683,447

Model Data

- Model data are also presented separately as river visitation data, reservoir visitation data, and economic impact data.

- The river visitation data includes Truckee River flow data from the U. S. Geological Survey (1999) and visitor flow preference and expenditure data from the river recreation survey by Aukerman (1999).

- The Truckee River monthly mean flow values at Farad, California, from 1915 to 1999, were analyzed to define higher minimum flow, more consistent flow, and higher flow levels for April through October.

- Truckee River flow frequency indicated that there were two distinct flow periods during the recreation season. The first flow period was seen in April, May, and June with monthly mean flow values from 500 to over 2,000 cubic-feet per second and the second period was seen in July, August, September, and October with monthly mean flow values at or near 500 cubic-feet per second.

- The monthly mean flow variances were calculated separately and between months for each flow period. The average of the monthly mean flow values for the thirty years with a minimum flow variance between months was defined as the more consistent flow level.

- The monthly mean flow values for the same thirty years were sorted in ascending order. The average of the values that were less than the more consistent flow level became the higher minimum flow level and the average of the values that were greater than the more consistent flow level became the higher flow level.

- The flow preferences of visitors, together with the number of visitors and the preferred time (April through October) for the visitors, developed the predetermined or projected number of visitors for higher minimum flow, more consistent flow, and higher flow levels.

- Fishing, fly fishing, kayaking, and rafting visitors each have monthly visitation response relationships to the flow levels for April through October.

- Expenditures are also separately given for fishing, fly fishing, kayaking, and rafting visitors.

- The reservoir visitation data includes end of the month reservoir storage data from the U. S. Geological Survey (1999), monthly visitor attendance data from the California Department of Parks and Recreation (1999), and reservoir recreation survey data from MacDiarmid (1995) and from the California Department of Water Resources (1999).

- The same method used to determine monthly visitor attendance at Donner Memorial State Park was applied to estimate annual visitor attendance at Donner Lake, Prosser Reservoir, Stampede Reservoir, and Boca Reservoir. Occupancy rates for overnight camp sites and for paid day use vehicles at Donner Memorial State Park were taken into account to calculate the camping and day use visitor attendance. These estimates in turn became the 1999 predetermined number of camping and day use visitors for the reservoir visitation calculation.

- The method used by the Donner Memorial State Park to calculate visitor attendance was found to be more accurate than an alternative method based on visitor days by the U. S. Forest Service (1998). This alternative method accounts for visitor days (12 hour periods) for different activities (general day camping, tent camping, trailer camping, vehicle camping, picnicking, and swimming and water play) and determines the use of facilities at the campgrounds possibly for budget purposes instead of actual visitor attendance. For example, if a person went to Stampede Reservoir with a tent to camp for one night and picnic and swim while they were there, they would be counted as two tent camping visitor days, one picnicking visitor day, and one swimming and water play visitor day, for a total of four visitor days. Therefore, for an entire campground, the relationship between the number of visitor days and number of visitors to estimate visitor attendance relevant to the size of the campground in terms of sites available and capacity for the season becomes difficult to define.

- Visitation response to reservoir storage levels for 1994 and for 1994 and 1999 combined are compared to each other for Donner Lake, Prosser Reservoir, Stampede Reservoir, and Boca Reservoir.

- Likewise monthly visitation for 1994 and for 1994 and 1999 combined are also compared to each other for Donner Lake, Prosser Reservoir, Stampede Reservoir, and Boca Reservoir.

- Camping and day use visitor expenditures for 1994 and for 1994 and 1999 combined are also separately given.

- The economic impact data includes 1992 input-output model data derived from MacDiarmid (1995) and 1995 input-output model data derived from Darden (1998).

- Response coefficients and multipliers for output, employment, and income for the trade sector, the eating, drinking, and lodging sector, and, the hotel, gaming, and recreation sector are also given separately for the 1992 and 1995 input-output models.

River Visitation Data

1915 to 1999 Truckee River Flows at Farad, California

Calendar Year	April	May	June	July	August	September	October
1915	1,617	1,914	1,465	614	574	491	402
1916	3,056	2,253	1,748	742	631	506	491
1917	1,674	2,063	2,560	1,122	697	530	438
1918	1,412	1,254	779	668	692	532	473
1919	2,143	2,298	691	600	600	512	408
1920	791	1,427	673	495	502	330	222
1921	1,168	1,523	1,281	540	514	509	384
1922	915	3,314	2,238	648	521	504	419
1923	1,301	1,901	979	586	530	517	422
1924	488	499	284	181	220	279	171
1925	1,117	1,326	632	471	419	258	240
1926	1,103	772	411	322	212	102	70
1927	1,722	2,314	2,024	635	510	491	437
1928	1,216	1,370	526	517	514	454	295
1929	506	1,022	497	319	252	251	139
1930	1,310	1,024	726	321	278	316	132
1931	456	521	142	54	54	75	75
1932	1,355	1,823	1,314	426	227	121	98
1933	573	811	1,067	240	84	47	78
1934	632	349	174	300	353	221	109
1935	1,589	2,029	1,229	312	137	73	76
1936	2,062	1,994	1,078	520	483	368	249
1937	1,250	1,684	791	535	461	287	205
1938	2,333	4,140	2,587	744	509	498	455
1939	592	569	506	500	503	499	403
1940	1,896	2,117	905	525	508	498	424
1941	741	1,686	923	552	517	506	417
1942	2,003	2,131	2,698	694	509	504	416
1943	2,903	1,821	1,052	579	540	524	487
1944	511	915	661	532	515	503	415
1945	834	1,596	798	526	501	502	437
1946	1,657	1,545	745	538	513	502	440
1947	562	754	512	509	503	498	425
1948	572	888	1,164	542	524	504	413
1949	780	1,010	564	512	465	371	261
1950	1,355	1,838	1,283	544	504	498	430
1951	790	1,182	1,000	533	532	513	420
1952	3,887	5,674	3,395	1,160	541	541	445
1953	839	1,519	2,082	1,060	578	565	505
1954	860	1,061	528	527	516	508	413
1955	510	721	765	521	524	491	395
1956	1,712	2,459	2,134	667	523	520	516
1957	788	1,163	1,394	587	546	530	440
1958	2,914	5,125	1,996	657	559	569	532

Calendar Year	April	May	June	July	August	September	October
1959	541	539	528	540	544	536	413
1960	744	761	675	605	560	495	365
1961	505	549	514	461	327	171	87
1962	1,262	1,259	878	514	500	484	694
1963	873	1,920	1,192	516	546	489	383
1964	656	1,067	732	529	532	488	387
1965	1,222	1,698	1,256	622	558	522	559
1966	691	939	525	568	574	497	392
1967	544	3,693	4,233	1,695	583	661	652
1968	623	849	596	568	535	513	397
1969	3,428	3,735	3,646	851	536	548	434
1970	615	1,148	1,155	913	616	566	524
1971	1,029	1,864	2,305	968	662	922	982
1972	852	1,181	762	509	564	500	384
1973	893	1,294	923	770	775	752	568
1974	2,054	2,203	1,559	1,216	822	635	562
1975	827	2,803	2,027	1,187	1,084	705	715
1976	920	958	709	748	731	645	511
1977	369	423	407	406	401	211	51
1978	845	1,898	936	555	509	522	513
1979	609	1,377	612	534	476	431	469
1980	958	2,035	1,284	603	536	517	401
1981	563	1,538	529	459	484	444	561
1982	2,372	4,301	2,482	765	512	683	823
1983	3,124	3,951	5,214	2,921	1,048	1,482	441
1984	1,055	1,668	1,426	664	508	505	406
1985	1,215	1,694	567	506	480	468	358
1986	2,554	2,404	1,301	519	496	476	410
1987	869	1,283	610	496	490	475	379
1988	469	498	472	483	505	254	54
1989	1,062	901	722	493	501	497	405
1990	792	609	444	398	351	150	96
1991	475	579	540	432	158	90	73
1992	490	454	155	116	106	97	61
1993	977	1,606	1,276	567	449	370	144
1994	816	1,368	545	153	112	91	61
1995	958	2,256	2,091	1,528	834	525	404
1996	1,986	3,381	1,902	904	554	600	422
1997	1,597	1,616	1,246	609	575	541	396
1998	2,016	2,640	3,022	1,406	737	687	588
1999	1,741	2,965	2,138	898	630	617	480

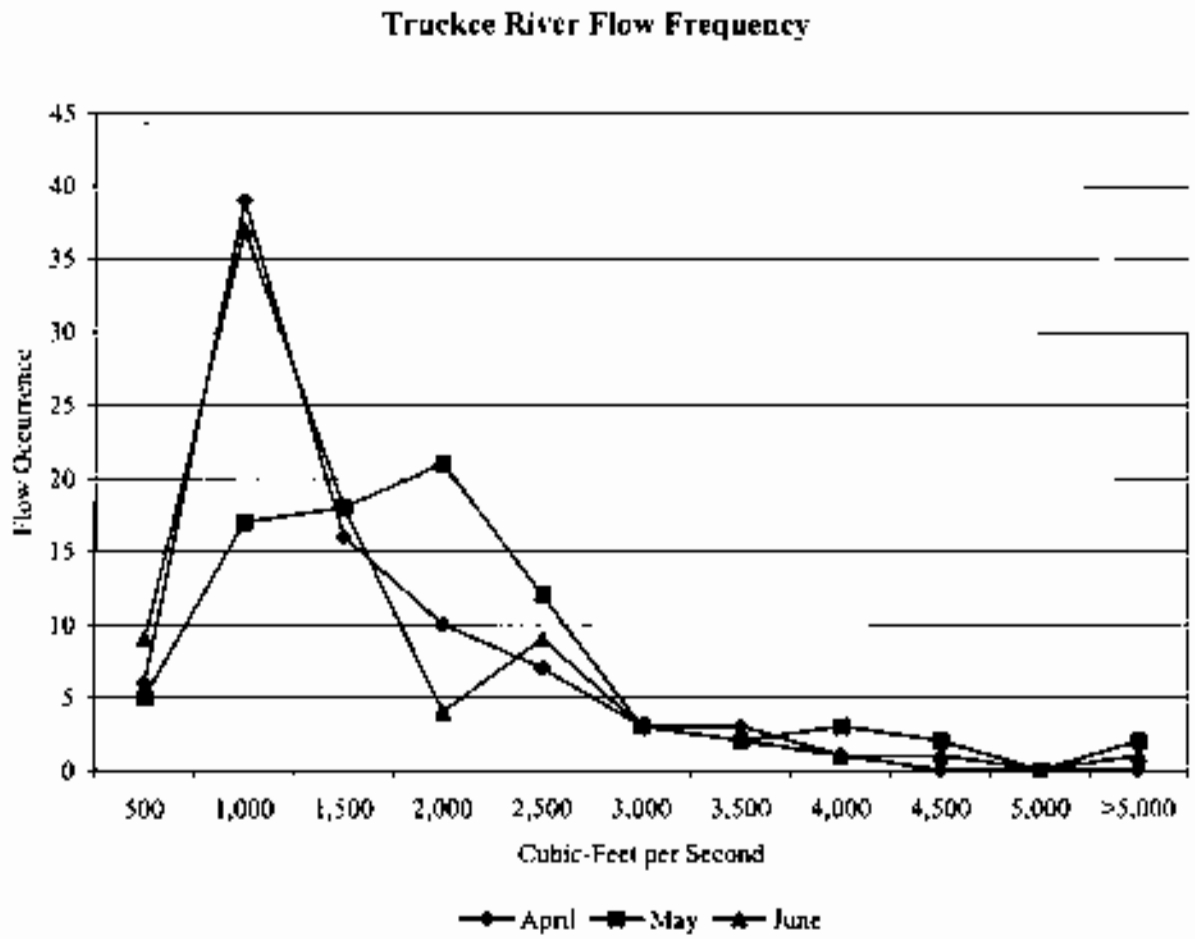
Descriptive Statistics

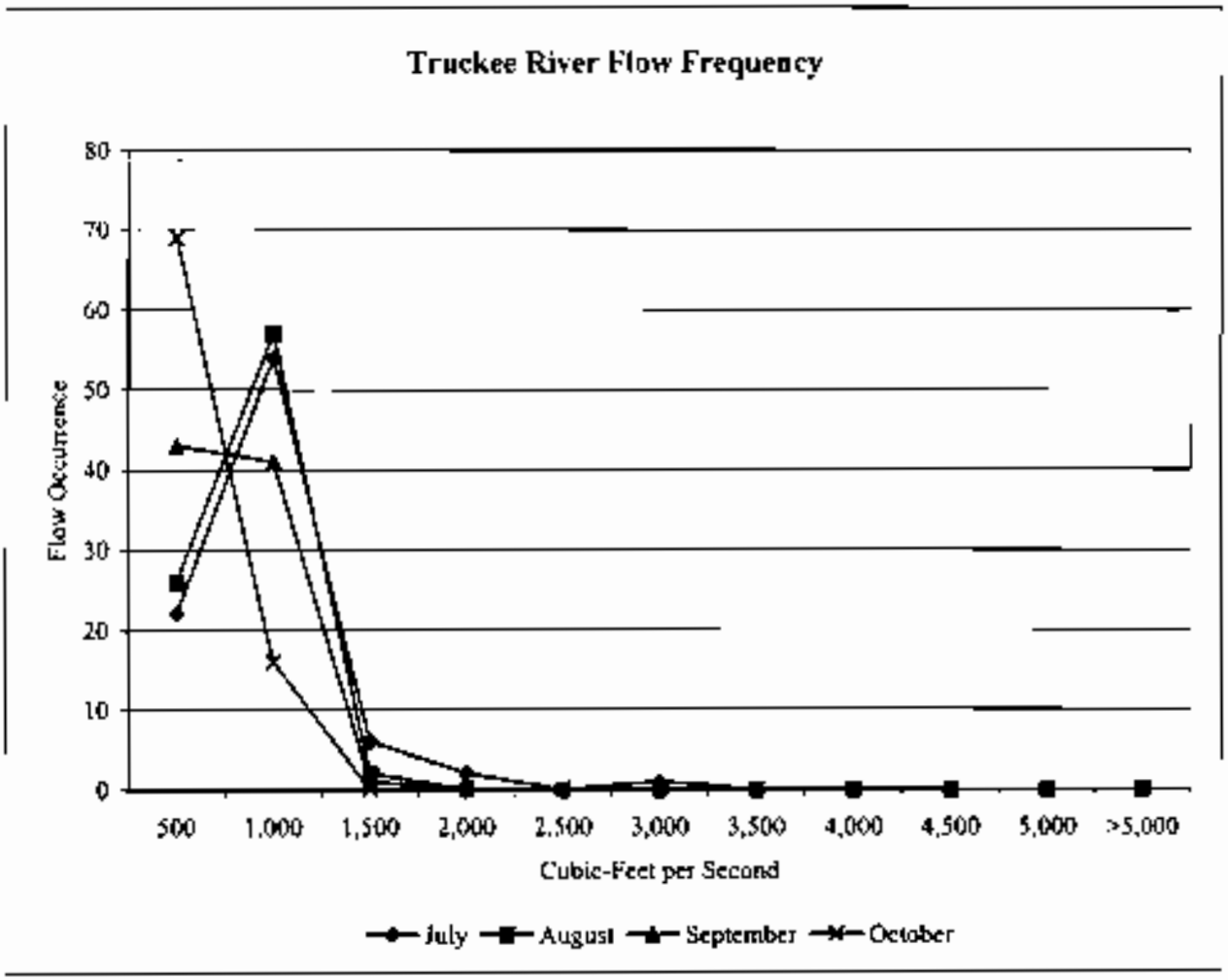
	April	May	June	July	August	September	October
Mean	1,232	1,709	1,237	640	505	462	379
Standard Error	83	115	101	41	19	22	20
Median	958	1,538	923	540	514	500	411
Mode 1/	1,355	#N/A	923	540	509	498	384
Standard Deviation	764	1,063	933	377	177	203	181
Sample Variance	584,360	1,129,191	870,163	142,188	31,472	41,339	32,876
Kurtosis	2	3	4	16	2	7	1
Skewness	1	1	2	3	0	1	0
Range	3,518	5,325	5,072	2,867	1,030	1,435	931
Minimum	369	349	142	54	54	47	51
Maximum	3,887	5,674	5,214	2,921	1,084	1,482	982
Sum	104,686	145,304	105,137	54,372	42,916	39,280	32,180
Count	85	85	85	85	85	85	85

1/ The #NA for Mode indicates that the data contains no duplicate data points.

Flow Frequency Histogram

Bin (cfs)	April	May	June	July	August	September	October
500	6	5	9	22	26	43	69
1,000	39	17	37	54	57	41	16
1,500	16	18	18	6	2	1	0
2,000	10	21	4	2	0	0	0
2,500	7	12	9	0	0	0	0
3,000	3	3	3	1	0	0	0
3,500	3	2	2	0	0	0	0
4,000	1	3	1	0	0	0	0
4,500	0	2	1	0	0	0	0
5,000	0	0	0	0	0	0	0
>5,000	0	2	1	0	0	0	0


Truckee River Flow Frequency
Flow Occurrence
45
40
35
30
25
20
15
10
5
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
>5,000
Cubic-Feet per Second
April
May
June


Truckee River Flow Frequency
Flow Occurrence
80
70
60
50
40
30
20
10
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
>5,000
Cubic-Feet per Second
July
August
September
October

Flow Range

	April	May	June	July	August	September	October
Floriston Rate	500	500	500	500	500	500	400
	369	423	407	459	476	431	379
	469	498	472	493	480	444	387
	475	539	506	496	484	468	388
	505	549	512	500	490	475	393
	510	569	514	506	496	476	403
	541	579	528	509	500	484	405
	562	721	540	514	501	488	410
	592	754	596	519	501	491	411
	623	761	675	521	503	491	413
	744	849	709	525	503	497	413
	790	901	722	526	504	498	415
	852	958	762	527	508	498	417
	893	1,181	765	529	509	498	420
	920	1,182	878	532	510	499	422
	1,055	1,259	923	533	513	502	424
	1,062	1,294	1,000	534	515	502	425
	1,168	1,523	1,246	538	516	503	430
	1,222	1,616	1,256	540	517	504	437
	1,262	1,668	1,281	542	523	506	437
	1,355	1,698	1,283	544	524	508	440
	1,355	1,823	1,314	552	524	513	449
	1,597	1,838	1,426	555	530	517	469
	1,617	1,914	1,465	579	532	520	487
	1,674	2,063	1,559	586	532	522	513
	1,712	2,131	2,024	587	540	522	516
	1,722	2,203	2,134	622	544	524	532
	2,003	2,314	2,560	635	546	530	559
	2,016	2,459	2,698	657	558	536	561
	2,054	2,640	3,022	667	559	569	568
	3,428	3,735	3,646	770	775	752	694
Higher Minimum Flow	714	814	691	521	503	488	415
More Consistent Flow	1,172	1,421	1,247	553	524	509	454
Higher Flow	1,771	2,116	1,974	629	568	551	544

Descriptive Statistics

	April	May	June	July	August	September	October
Mean	1,172	1,421	1,247	553	524	509	454
Standard Error	123	145	153	12	9	10	13
Median	1,059	1,277	962	534	514	502	425
Mode /2	1,355	#N/A	#N/A	#N/A	501	498	413
Standard Deviation	672	792	838	63	52	53	71
Sample Variance	451,288	626,503	701,552	4,007	2,703	2,804	5,045
Kurtosis	3	1	1	4	20	16	3
Skewness	1	1	1	2	4	3	2
Range	3,059	3,312	3,239	311	299	321	315
Minimum	369	423	407	459	476	431	379
Maximum	3,428	3,735	3,646	770	775	752	694
Sum	35,147	42,642	37,423	16,597	15,713	15,268	13,617
Count	30	30	30	30	30	30	30

2/ The #NA for Mode indicates that the data contains no duplicate data points.

Flow Frequency Histogram

Bin (cfs)	April	May	June	July	August	September	October
500	3	2	2	4	6	14	23
1,000	11	10	14	26	24	16	7
1,500	7	4	7	0	0	0	0
2,000	5	7	1	0	0	0	0
2,500	3	5	2	0	0	0	0
3,000	0	1	2	0	0	0	0
3,500	1	0	1	0	0	0	0
4,000	0	1	1	0	0	0	0
4,500	0	0	0	0	0	0	0
5,000	0	0	0	0	0	0	0
>5,000	0	0	0	0	0	0	0

River Users

River Users	182
Fishing River Users	42
Fly Fishing River Users	66
Kayaking River Users	46
Rafting River Users	38

Fishing, Fly Fishing, Kayaking, and Rafting Visitors per Season

Visitors per Day	343
Days per Season	214
Visitors per Season	73,402
Fishing Visitors per Season	23%
Fishing Visitors per Season	16,882
Fly Fishing Visitors per Season	34%
Fly Fishing Visitors per Season	24,957
Kayaking Visitors per Season	24%
Kayaking Visitors per Season	17,616
Rafting Visitors per Season	20%
Rafting Visitors per Season	14,680

Preferred Time for Visitors

	April	May	June	July	August	September	October
All Visitors	13%	13%	19%	21%	20%	7%	7%
All Visitors	9,886	9,886	13,717	15,447	14,334	5,190	4,943

Time when River Flows are Best for Fishing, Fly Fishing, Kayaking, Rafting

	April	May	June	July	August	September	October
Fishing Visitors	9%	9%	20%	25%	21%	8%	7%
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,275
Fly Fishing Visitors	12%	12%	10%	22%	19%	14%	12%
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Kayaking Visitors	31%	33%	13%	11%	10%	2%	2%
Kayaking Visitors	5,472	5,739	2,269	1,868	1,735	267	267
Rafting Visitors	9%	9%	22%	33%	24%	2%	1%
Rafting Visitors	1,321	1,321	3,230	4,845	3,523	294	147

Projected Visitors at 1999 Flow

	April	May	June	July	August	September	October
1999 Flow	1,741	2,965	2,138	898	630	617	480
All Visitors	9,886	9,886	13,717	15,447	14,334	5,190	4,943
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Kayaking Visitors	5,472	5,739	2,269	1,868	1,735	267	267
Rafting Visitors	1,321	1,321	3,230	4,845	3,523	294	147

Projected Visitors at Higher Minimum Flow

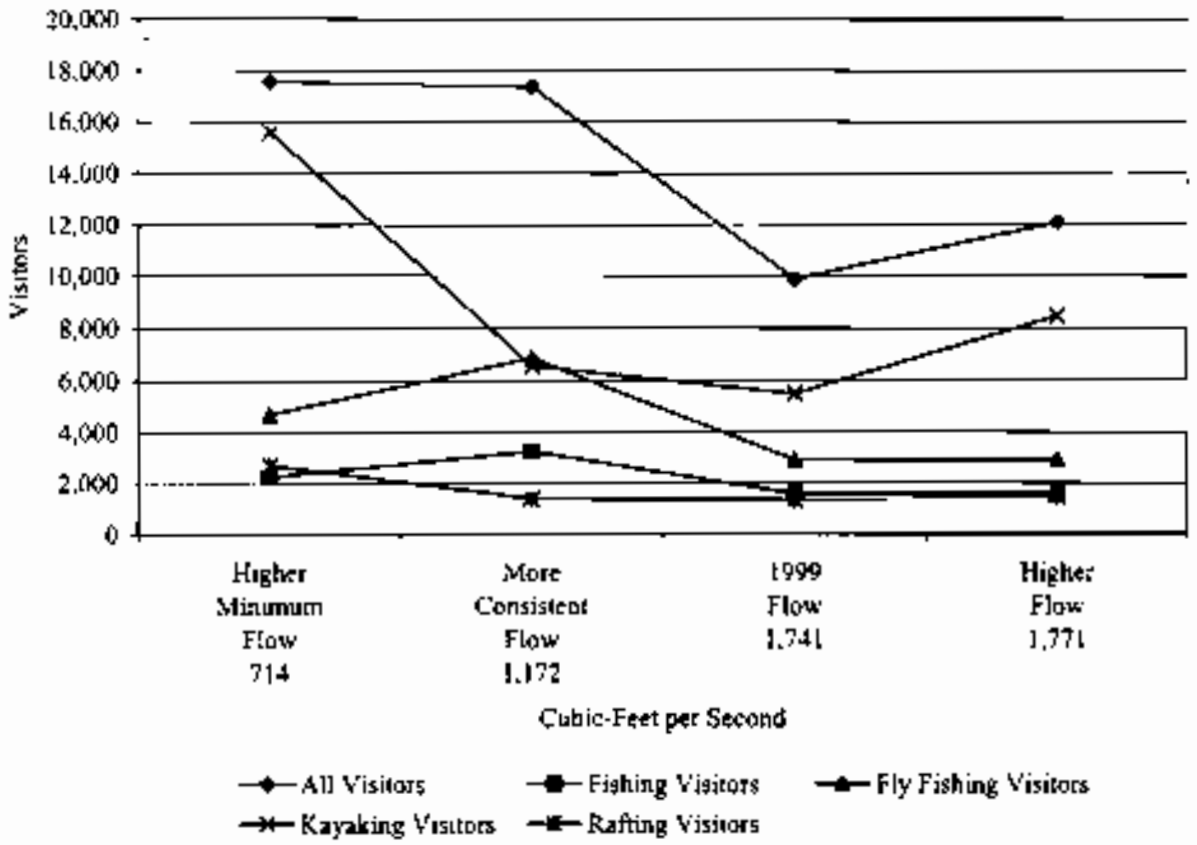
	April	May	June	July	August	September	October
Higher Minimum Flow	714	814	691	521	503	488	415
All Visitors	9,886	9,886	13,717	15,447	14,334	5,190	4,943
Percentage of Visitors	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%
Increase in Visits per Visitor	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Increase in Visitors	7,688	7,688	10,667	12,013	11,148	4,036	3,844
Cumulative All Visitors	17,574	17,574	24,384	27,459	25,482	9,226	8,787
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Percentage of Visitors	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Increase in Visits per Visitor	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Increase in Visitors	644	644	1,388	1,734	1,437	545	496
Cumulative Fishing Visitors	2,223	2,223	4,788	5,985	4,959	1,881	1,710
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Percentage of Visitors	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Increase in Visits per Visitor	13.3	13.3	13.3	13.3	13.3	13.3	13.3
Increase in Visitors	1,749	1,749	1,480	3,297	2,893	2,018	1,749
Cumulative Fly Fishing Visitors	4,672	4,672	3,953	8,805	7,727	5,391	4,672
Kayaking Visitors	5,472	5,739	2,269	1,868	1,735	267	267
Percentage of Visitors	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Increase in Visits per Visitor	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Increase in Visitors	10,112	10,605	4,193	3,453	3,206	493	493
Cumulative Kayaking Visitors	15,584	16,344	6,462	5,321	4,941	760	760
Rafting Visitors	1,321	1,321	3,230	4,845	3,523	294	147
Percentage of Visitors	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Increase in Visits per Visitor	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Increase in Visitors	1,374	1,374	3,359	5,038	3,664	305	152
Cumulative Rafting Visitors	2,695	2,695	6,589	9,883	7,188	599	299
All Visitors	17,574	17,574	24,384	27,459	25,482	9,226	8,787
Fishing Visitors	2,223	2,223	4,788	5,985	4,959	1,881	1,710
Fly Fishing Visitors	4,672	4,672	3,953	8,805	7,727	5,391	4,672
Kayaking Visitors	15,584	16,344	6,462	5,321	4,941	760	760
Rafting Visitors	2,695	2,695	6,589	9,883	7,188	599	299

Projected Visitors at More Consistent Flow

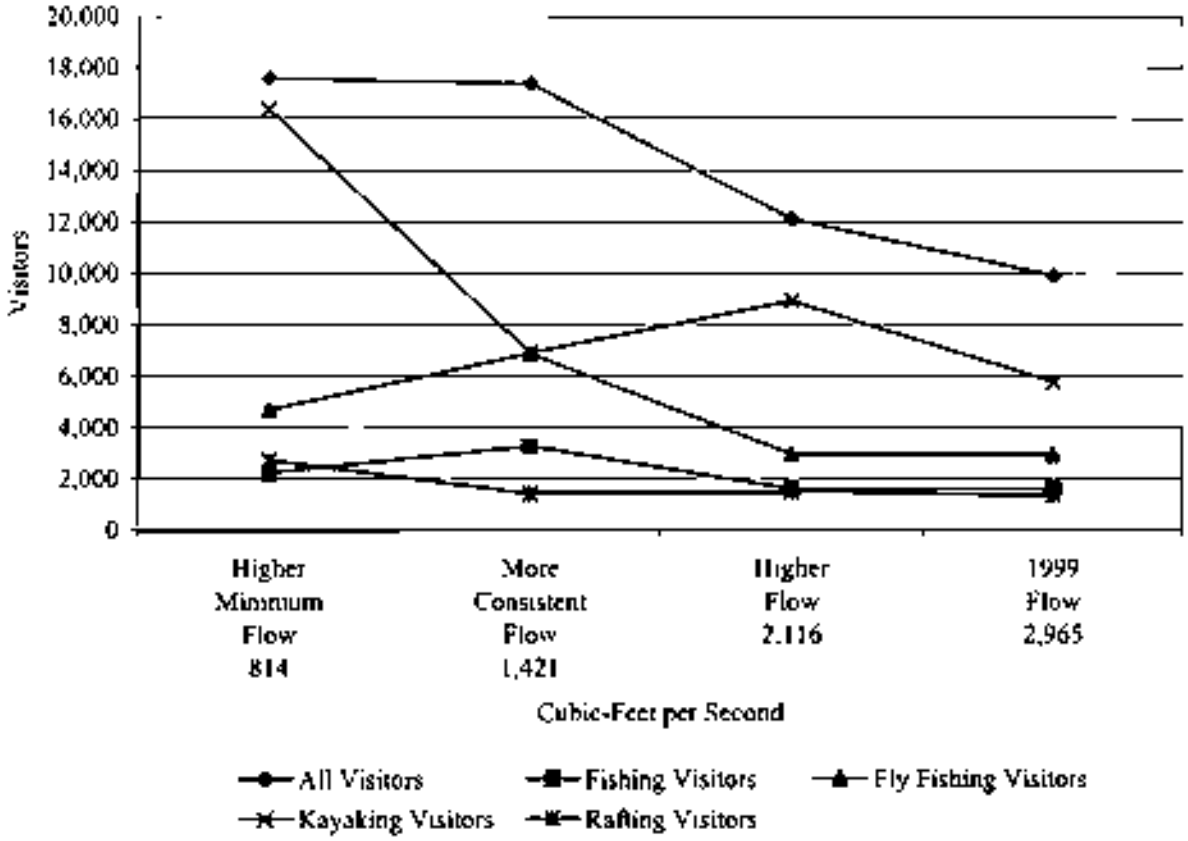
	April	May	June	July	August	September	October
More Consistent Flow	1,172	1,421	1,247	553	524	509	454
All Visitors	9,886	9,886	13,717	15,447	14,334	5,190	4,943
Percentage of Visitors	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
Increase in Visits per Visitor	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Increase in Visitors	7,471	7,471	10,366	11,673	10,833	3,922	3,735
Cumulative All Visitors	17,356	17,356	24,082	27,120	25,167	9,112	8,678
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Percentage of Visitors	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%
Increase in Visits per Visitor	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Increase in Visitors	1,664	1,664	3,584	4,481	3,712	1,408	1,280
Cumulative Fishing Visitors	3,243	3,243	6,985	8,732	7,235	2,744	2,495
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Percentage of Visitors	40.8%	40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Increase in Visits per Visitor	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Increase in Visitors	3,935	3,935	3,330	7,417	6,508	4,541	3,935
Cumulative Fly Fishing Visitors	6,858	6,858	5,803	12,925	11,342	7,913	6,858
Kayaking Visitors	5,472	5,739	2,269	1,868	1,735	267	267
Percentage of Visitors	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
Increase in Visits per Visitor	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Increase in Visitors	1,083	1,136	449	370	344	53	53
Cumulative Kayaking Visitors	6,555	6,875	2,718	2,238	2,078	320	320
Rafting Visitors	1,321	1,321	3,230	4,845	3,523	294	147
Percentage of Visitors	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%
Increase in Visits per Visitor	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Increase in Visitors	69	69	168	252	183	15	8
Cumulative Rafting Visitors	1,390	1,390	3,398	5,096	3,707	309	154
All Visitors	17,356	17,356	24,082	27,120	25,167	9,112	8,678
Fishing Visitors	3,243	3,243	6,985	8,732	7,235	2,744	2,495
Fly Fishing Visitors	6,858	6,858	5,803	12,925	11,342	7,913	6,858
Kayaking Visitors	6,555	6,875	2,718	2,238	2,078	320	320
Rafting Visitors	1,390	1,390	3,398	5,096	3,707	309	154

Projected Visitors at Higher Flow

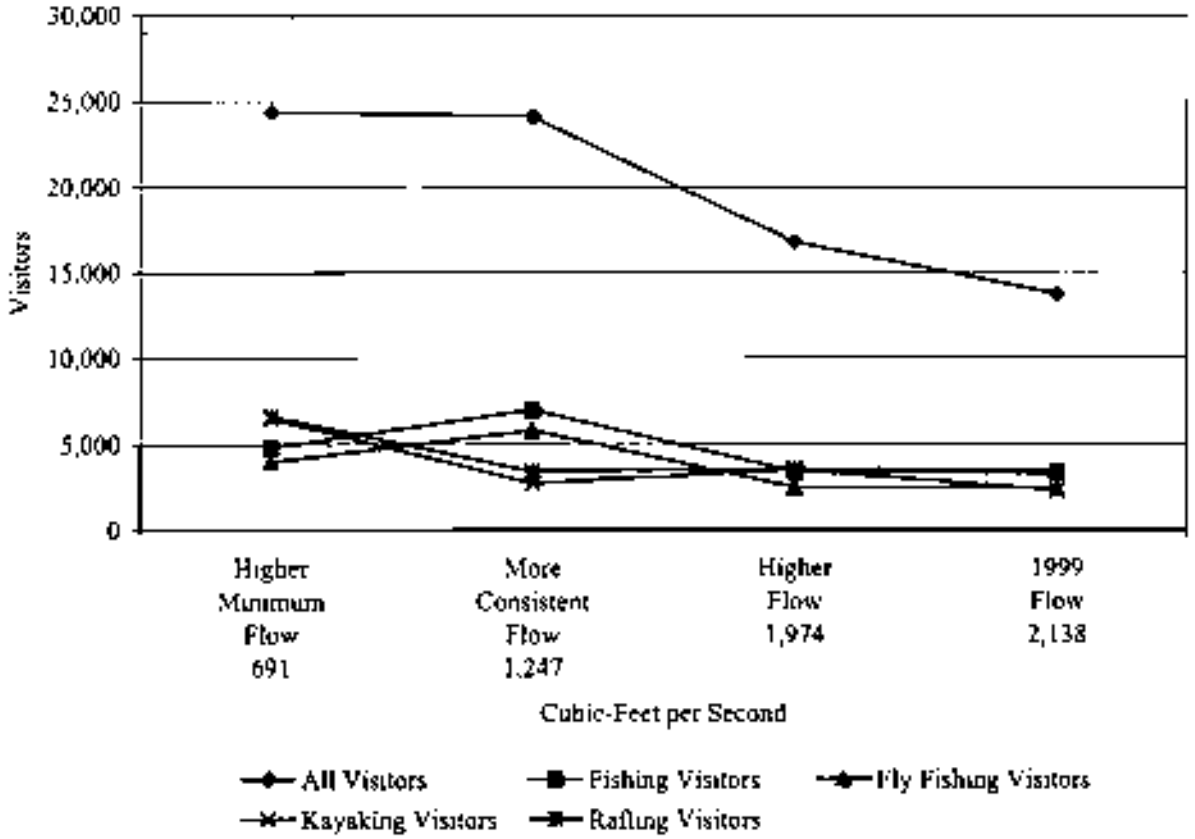
	April	May	June	July	August	September	October
Higher Flow	1,771	2,116	1,974	629	568	551	544
All Visitors	9,886	9,886	13,717	15,447	14,334	5,290	4,943
Percentage of Visitors	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Increase in Visits per Visitor	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Increase in Visitors	2,207	2,207	3,062	3,448	3,199	1,158	1,103
Cumulative All Visitors	12,092	12,092	16,778	18,894	17,534	6,348	6,046
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Percentage of Visitors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase in Visits per Visitor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase in Visitors	0	0	0	0	0	0	0
Cumulative Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Percentage of Visitors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase in Visits per Visitor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase in Visitors	0	0	0	0	0	0	0
Cumulative Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Kayaking Visitors	5,472	5,739	2,269	1,868	1,735	267	267
Percentage of Visitors	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Increase in Visits per Visitor	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Increase in Visitors	3,009	3,156	1,248	1,028	954	147	147
Cumulative Kayaking Visitors	8,481	8,895	3,517	2,896	2,689	414	414
Rafting Visitors	1,321	1,321	3,230	4,845	3,523	294	147
Percentage of Visitors	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Increase in Visits per Visitor	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Increase in Visitors	137	137	336	504	366	31	15
Cumulative Rafting Visitors	1,459	1,459	3,566	5,348	3,890	324	162
All Visitors	12,092	12,092	16,778	18,894	17,534	6,348	6,046
Fishing Visitors	1,579	1,579	3,401	4,251	3,522	1,336	1,215
Fly Fishing Visitors	2,923	2,923	2,473	5,508	4,834	3,373	2,923
Kayaking Visitors	8,481	8,895	3,517	2,896	2,689	414	414
Rafting Visitors	1,459	1,459	3,566	5,348	3,890	324	162

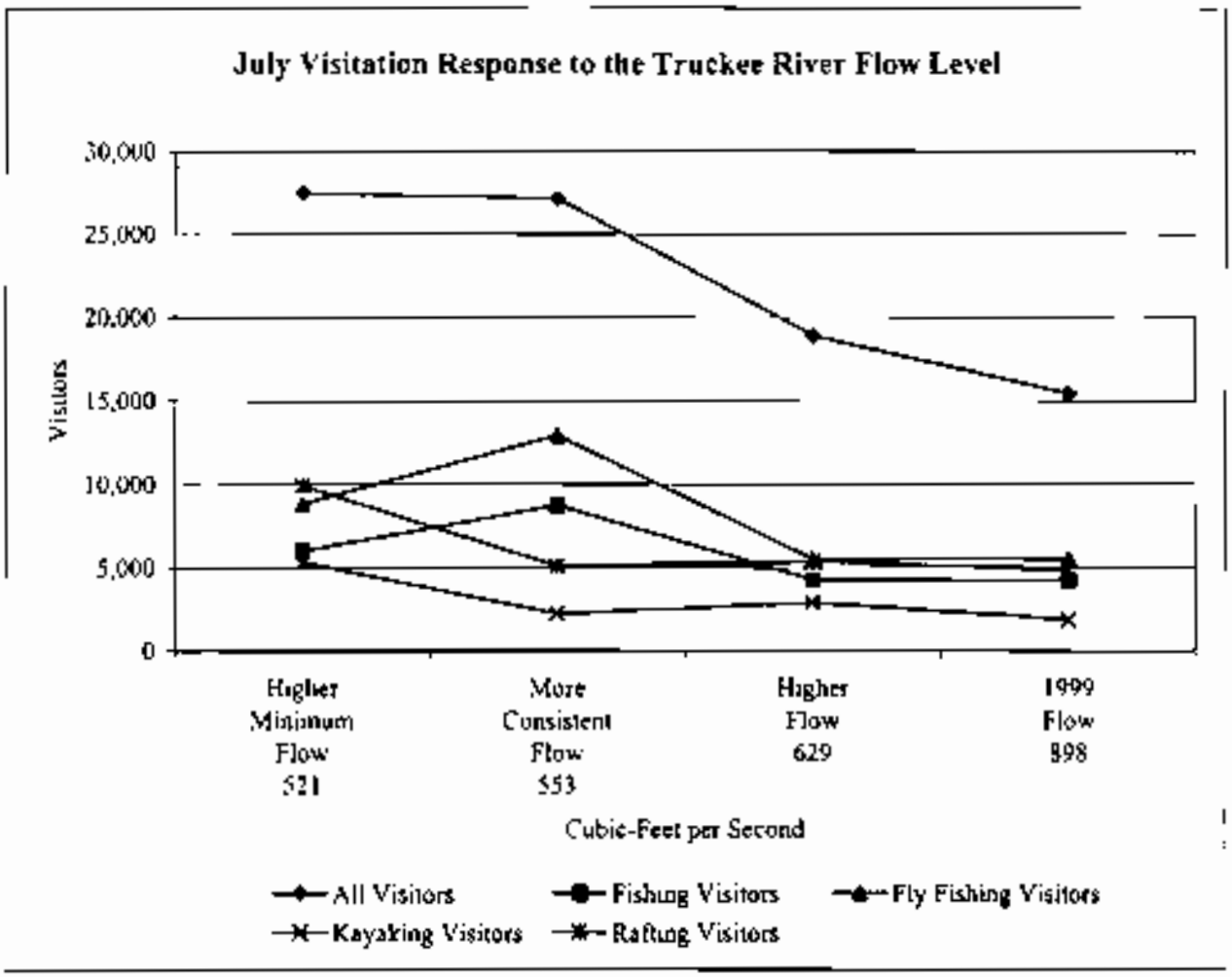

April Visitation Response to the Truckee River Flow Level
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Visitors
Higher Minumum Flow 714
More Consistent Flow 1,172
1999 Flow 1,741
Higher Flow 1,771
Cubic-Feet per Second
All Visitors
Fishing Visitors
Fly Fishing Visitors
Kayaking Visitors
Rafting Visitors

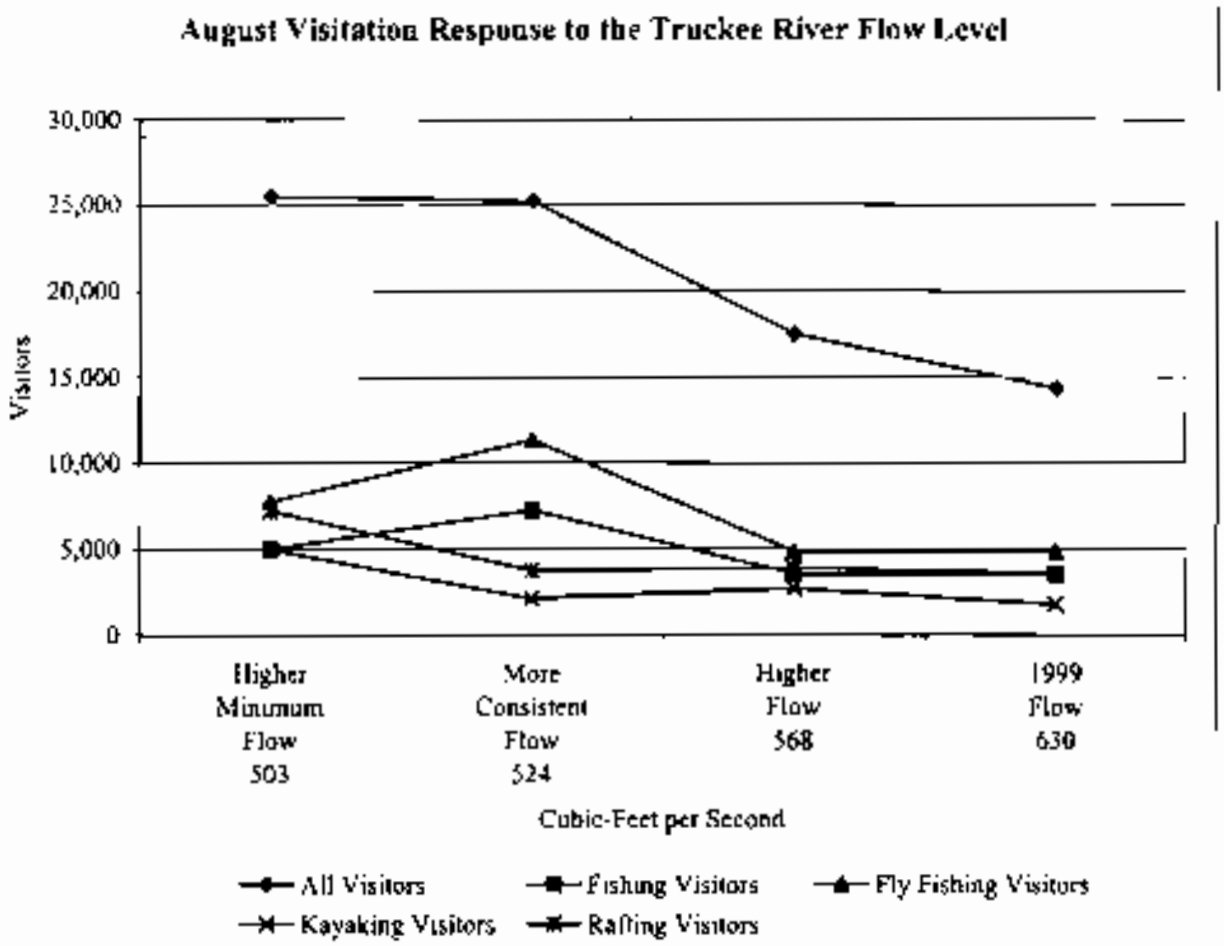
May Visitation Response to the Truckee River Flow Level

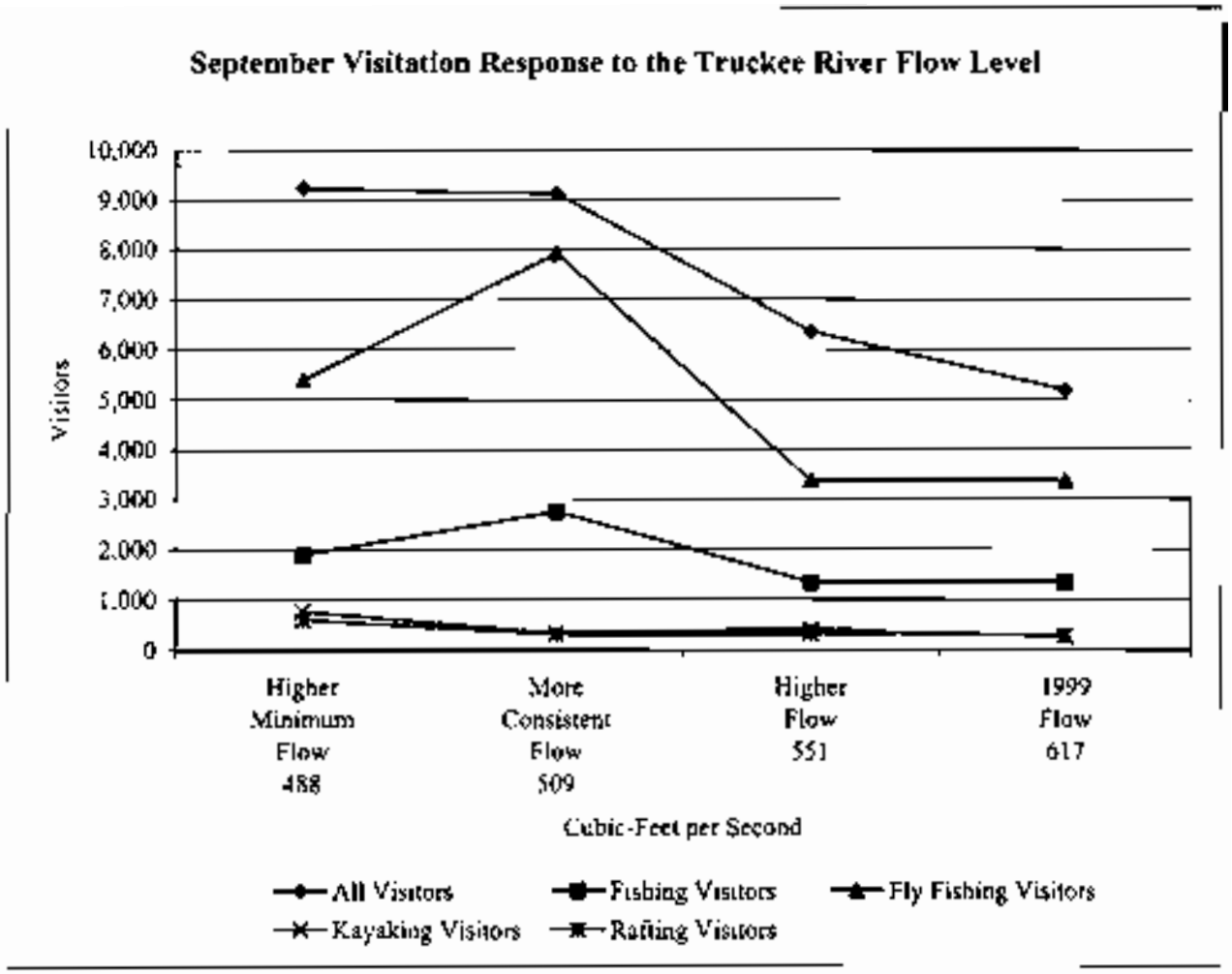


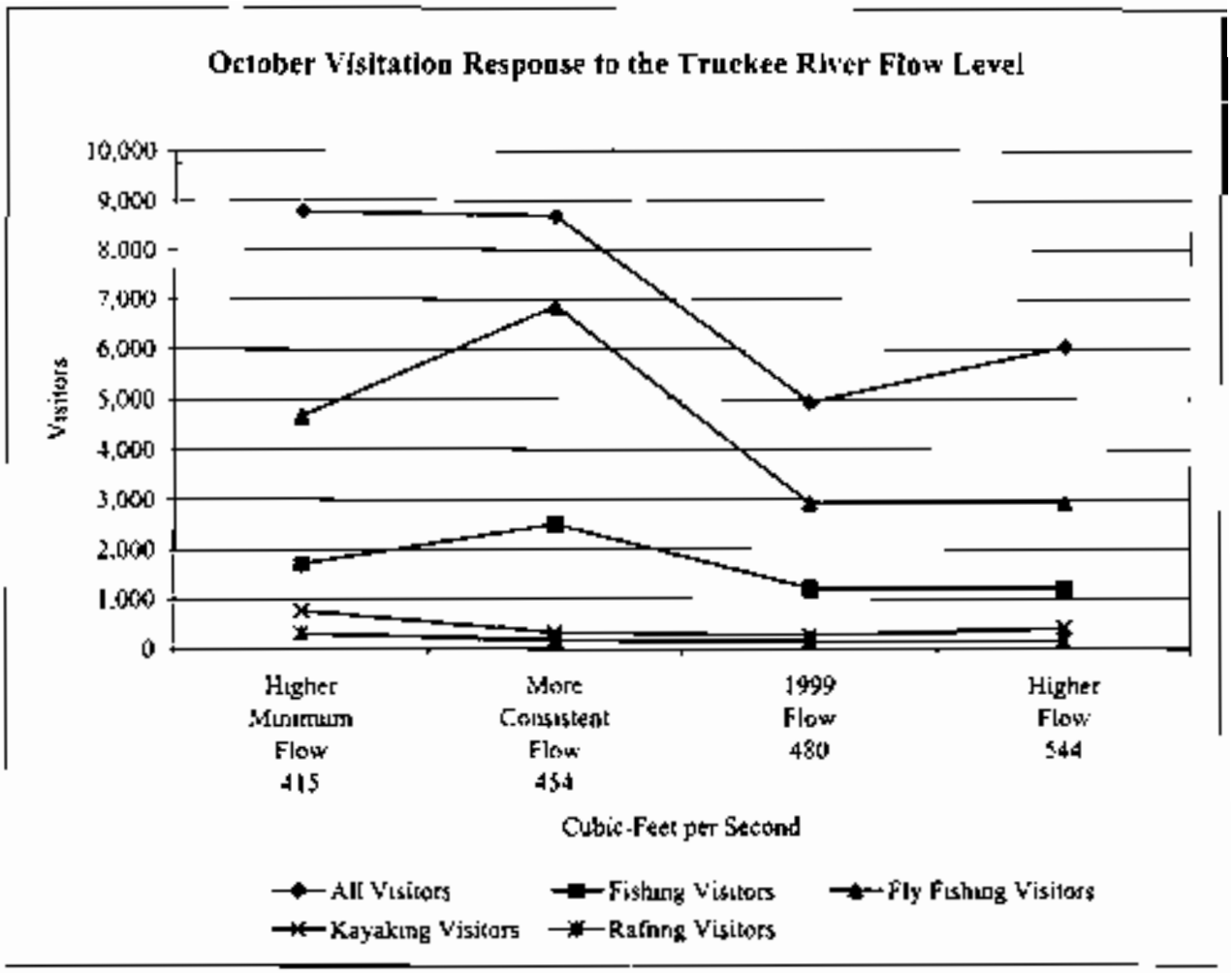
June Visitation Response to the Truckee River Flow Level




July Visitation Response to the Truckee River Flow Level
30,000
25,000
20,000
15,000
10,000
5,000
0
Visitors
Higher Minimum Flow 521
More Consistent Flow 553
Higher Flow 629
1999 Flow 898
Cubic-Feet per Second
All Visitors
Fishing Visitors
Fly Fishing Visitors
Kayaking Visitors
Rafting Visitors


August Visitation Response to the Truckee River Flow Level
30,000
25,000
20,000
15,000
10,000
5,000
0
Visitors
Higher Minimum Flow 503
More Consistent Flow 524
Higher Flow 568
1999 Flow 630
Cubic-Feet per Second
All Visitors
Fishing Visitors
Fly Fishing Visitors
Kayaking Visitors
Rafting Visitors


September Visitation Response to the Truckee River Flow Level
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Visitors
Higher Minimum Flow 488
More Consistent Flow 509
Higher Flow 551
1999 Flow 617
Cubic-Feet per Second
All Visitors
Fishing Visitors
Fly Fishing Visitors
Kayaking Visitors
Rafting Visitors


October Visitation Response to the Truckee River Flow Level
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Visitors
Higher Minimum Flow 415
More Consistent Flow 454
1999 Flow 480
Higher Flow 544
Cubic-Feet per Second
All Visitors
Fishing Visitors
Fly Fishing Visitors
Kayaking Visitors
Rafting Visitors

Average Visitor Group Size

Visitors (respondents)	167
Total Individuals per Visit	612
Average Visitor Group Size	3.66

Visitor Expenditures

All Visitors		
Camping Fees	1,091	5.99
License Fees	1,299	7.14
Hotel and Motel	4,170	22.91
Restaurant	4,629	25.43
Groceries and Supplies	4,968	27.30
Gas	2,672	14.68
Shopping	2,350	12.91
Equipment Rentals	780	4.29
Fishing Supplies	2,035	11.18
Guide Services	955	5.25
Other	200	1.10
Total	25,149	138.18
Fishing Visitors		
Camping Fees	382	9.10
License Fees	585	13.93
Hotel and Motel	0	0.00
Restaurant	374	8.90
Groceries and Supplies	615	14.64
Gas	385	9.17
Shopping	420	10.00
Equipment Rentals	220	5.24
Fishing Supplies	665	15.83
Guide Services	0	0.00
Other	140	3.33
Total	3,786	90.14

Fly Fishing Visitors		
Camping Fees	268	4.06
License Fees	544	8.24
Hotel and Motel	2,455	37.20
Restaurant	1,665	25.23
Groceries and Supplies	2,080	31.52
Gas	830	12.58
Shopping	595	9.02
Equipment Rentals	130	1.97
Fishing Supplies	1,015	15.38
Guide Services	515	7.80
Other	0	0.00
Total	10,097	152.98
Kayaking Visitors		
Camping Fees	0	0.00
License Fees	90	1.96
Hotel and Motel	0	0.00
Restaurant	460	10.00
Groceries and Supplies	428	9.30
Gas	685	14.89
Shopping	100	2.17
Equipment Rentals	100	2.17
Fishing Supplies	200	4.35
Guide Services	0	0.00
Other	0	0.00
Total	2,063	44.85
Rafting Visitors		
Camping Fees	224	5.89
License Fees	25	0.66
Hotel and Motel	1,715	45.13
Restaurant	1,530	40.26
Groceries and Supplies	1,195	31.45
Gas	470	12.37
Shopping	935	24.61
Equipment Rentals	290	7.63
Fishing Supplies	0	0.00
Guide Services	440	11.58
Other	60	1.58
Total	6,884	181.16

Reservoir Visitation Data

1999 End of the Month Reservoir Storage Levels

Calendar Year	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
April	5,040	14,530	208,322	34,385
May	8,130	21,362	219,968	35,816
June	9,470	28,345	223,544	39,984
July	9,030	25,387	210,529	38,131
August	8,490	20,304	205,086	35,579
September	6,330	13,894	200,752	32,483
October	3,650	9,905	199,616	26,647
Other Months (average)	3,604	9,806	202,678	26,222
January	3,770	9,676	204,633	32,789
February	3,800	9,859	204,208	32,886
March	3,960	9,811	204,663	32,553
November	3,290	9,939	199,863	20,918
December	3,200	9,744	200,022	11,965

1999 Camping Visitor Attendance

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Days per Month				
April	30	30	30	30
May	31	31	31	31
June	30	30	30	30
July	31	31	31	31
August	31	31	31	31
September	30	30	30	30
October	31	31	31	31
Sites per Campground per Day				
April	152	46	216	59
May	152	46	216	59
June	152	46	216	59
July	152	46	216	59
August	152	46	216	59
September	152	46	216	59
October	152	46	216	59
Potential Site Occupancy per Campground per Month				
April	4,560	1,380	6,480	1,770
May	4,712	1,426	6,696	1,829
June	4,560	1,380	6,480	1,770
July	4,712	1,426	6,696	1,829
August	4,712	1,426	6,696	1,829
September	4,560	1,380	6,480	1,770
October	4,712	1,426	6,696	1,829
Actual Site Occupancy per Campground per Month				
April	0	0	0	0
May	201	61	286	78
June	1,195	362	1,698	464
July	3,139	950	4,461	1,218
August	2,940	890	4,178	1,142
September	1,162	352	1,651	451
October	131	40	186	51
Total	8,768	2,653	12,460	3,403

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Actual Site Occupancy Rate per Campground per Month				
April	0.00%	0.00%	0.00%	0.00%
May	4.27%	4.27%	4.27%	4.27%
June	26.21%	26.21%	26.21%	26.21%
July	66.62%	66.62%	66.62%	66.62%
August	62.39%	62.39%	62.39%	62.39%
September	25.48%	25.48%	25.48%	25.48%
October	2.78%	2.78%	2.78%	2.78%
Camping Visitor Conversion Factor per Month				
April	4.20	4.20	4.20	4.20
May	4.20	4.20	4.20	4.20
June	4.20	4.20	4.20	4.20
July	5.10	5.10	5.10	5.10
August	5.10	5.10	5.10	5.10
September	5.10	5.10	5.10	5.10
October	4.20	4.20	4.20	4.20
Camping Visitors				
April	0	0	0	0
May	844	255	1,200	328
June	5,019	1,519	7,132	1,948
July	16,009	4,845	22,749	6,214
August	14,994	4,538	21,307	5,820
September	5,926	1,793	8,421	2,300
October	550	167	782	214
Total	43,343	13,117	61,592	16,824

1999 Day Use Visitor Attendance

	Donner Lake	Donner Lake Other	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Days per Month					
April	30	30	30	30	30
May	31	31	31	31	31
June	30	30	30	30	30
July	31	31	31	31	31
August	31	31	31	31	31
September	30	30	30	30	30
October	31	31	31	31	31
Spaces per Day Use Area per Day					
April	200	400	60	100	120
May	200	400	60	100	120
June	200	400	60	100	120
July	200	400	60	100	120
August	200	400	60	100	120
September	200	400	60	100	120
October	200	400	40	100	120
Potential Space Occupancy per Day Use Area per Month					
April	6,000	12,000	1,800	3,000	3,600
May	6,200	12,400	1,860	3,100	3,720
June	6,000	12,000	1,800	3,000	3,600
July	6,200	12,400	1,860	3,100	3,720
August	6,200	12,400	1,860	3,100	3,720
September	6,000	12,000	1,800	3,000	3,600
October	6,200	12,400	1,240	3,100	3,720
Actual Space Occupancy per Day Use Area per Month					
April	96	192	29	48	58
May	402	804	121	201	241
June	1,024	2,048	307	512	614
July	3,222	6,444	967	1,611	1,933
August	2,068	4,136	620	1,034	1,241
September	609	1,218	183	305	365
October	24	48	5	12	14
Total	7,445	14,890	2,231	3,723	4,467

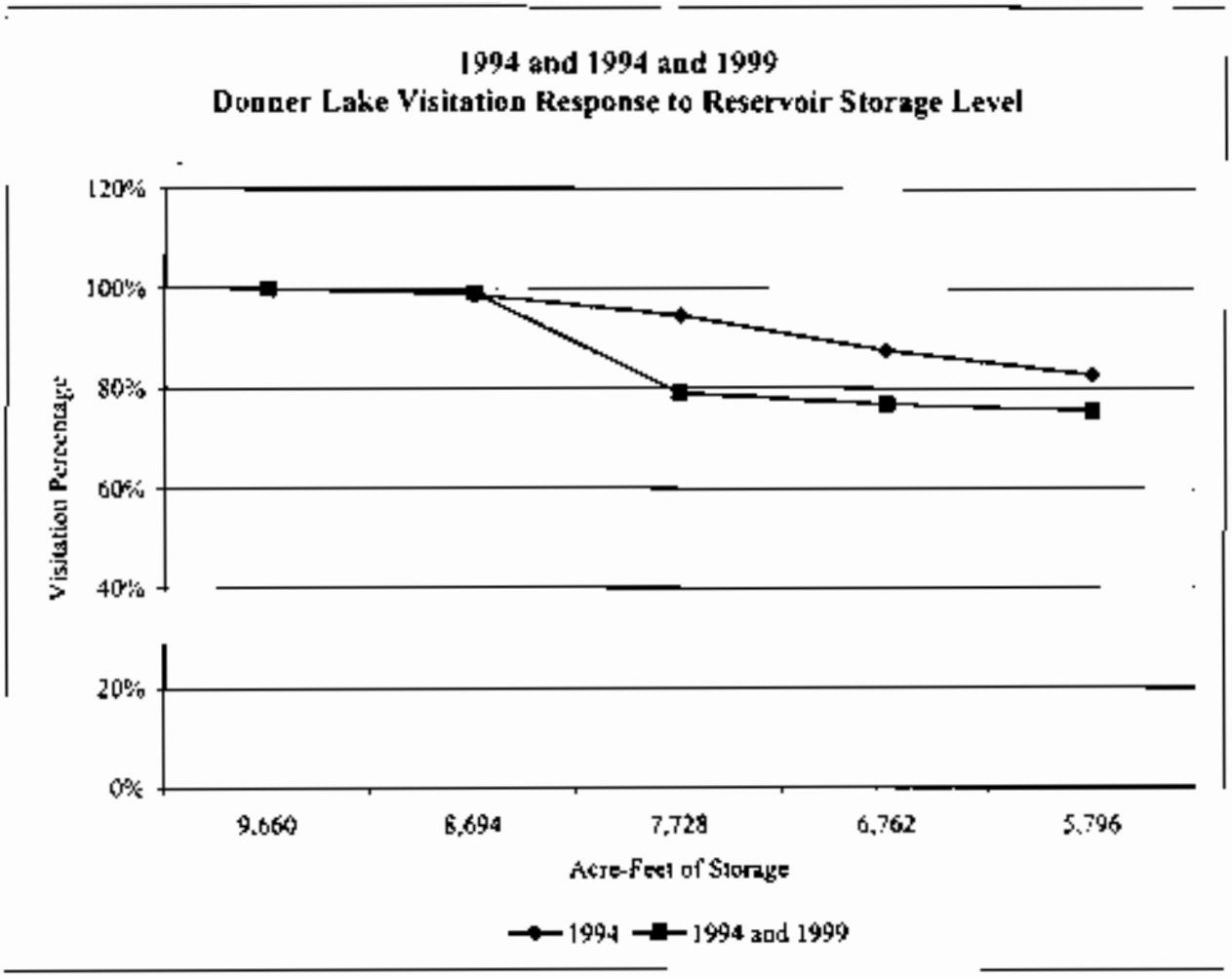
	Donner Lake	Donner Lake Other	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Actual Space Occupancy Rate per Day Use Area per Month					
April	1.60%	1.60%	1.60%	1.60%	1.60%
May	6.48%	6.48%	6.48%	6.48%	6.48%
June	17.07%	17.07%	17.07%	17.07%	17.07%
July	51.97%	51.97%	51.97%	51.97%	51.97%
August	33.35%	33.35%	33.35%	33.35%	33.35%
September	10.15%	10.15%	10.15%	10.15%	10.15%
October	0.39%	0.39%	0.39%	0.39%	0.39%
Day Use Visitor Conversion Factor per Month					
April	3.20	3.20	3.20	3.20	3.20
May	3.20	3.20	3.20	3.20	3.20
June	3.20	3.20	3.20	3.20	3.20
July	3.20	3.20	3.20	3.20	3.20
August	3.20	3.20	3.20	3.20	3.20
September	3.20	3.20	3.20	3.20	3.20
October	3.20	3.20	3.20	3.20	3.20
Day Use Visitors					
April	307	614	92	154	184
May	1,286	2,573	386	643	772
June	3,277	6,554	983	1,638	1,966
July	10,310	20,621	3,093	5,155	6,186
August	6,618	13,235	1,985	3,309	3,971
September	1,949	3,898	585	974	1,169
October	77	154	15	38	46
Total	23,824	47,648	7,140	11,912	14,294

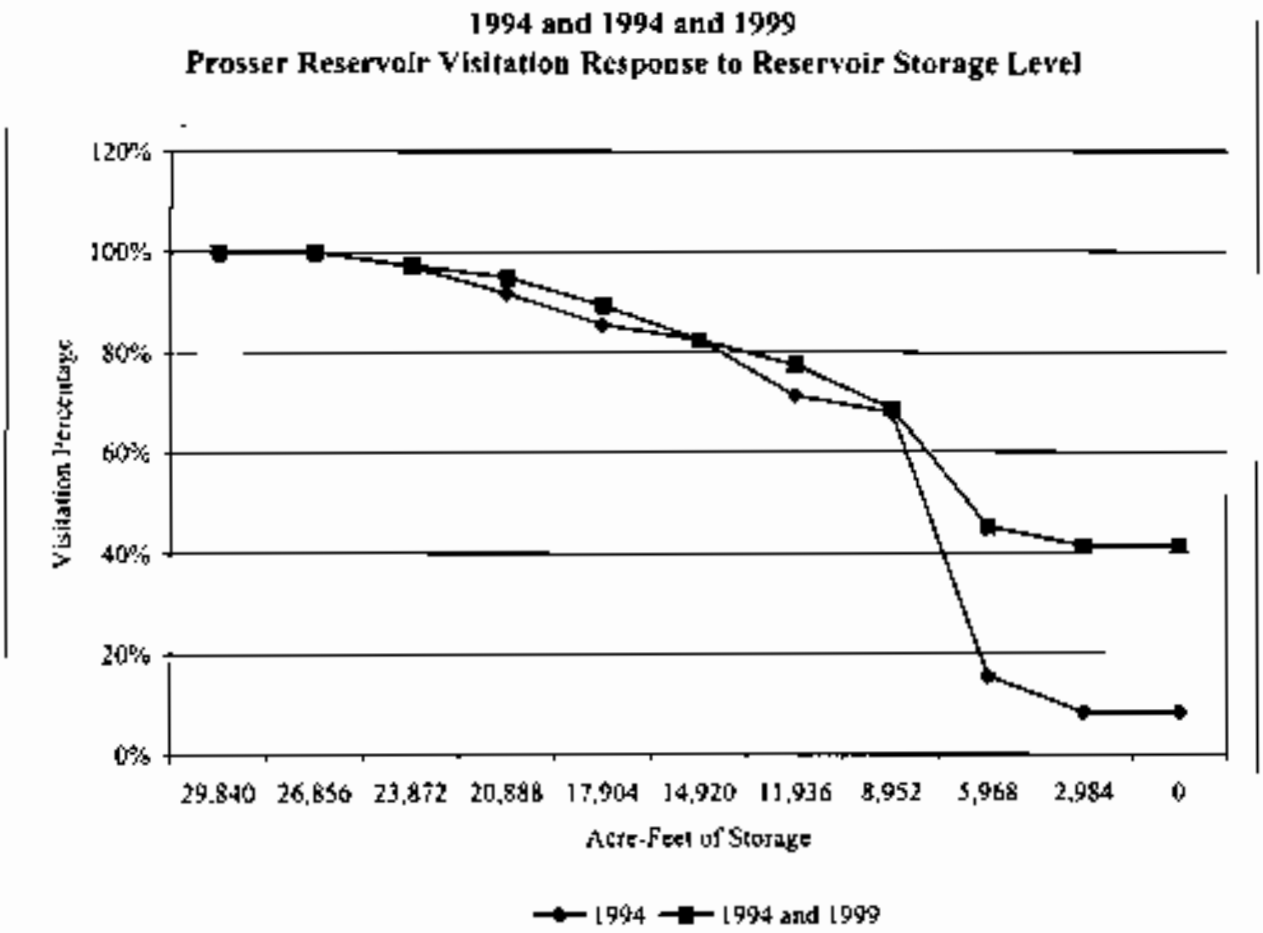
1994 Visitation Response to the End of the Month Reservoir Storage Levels

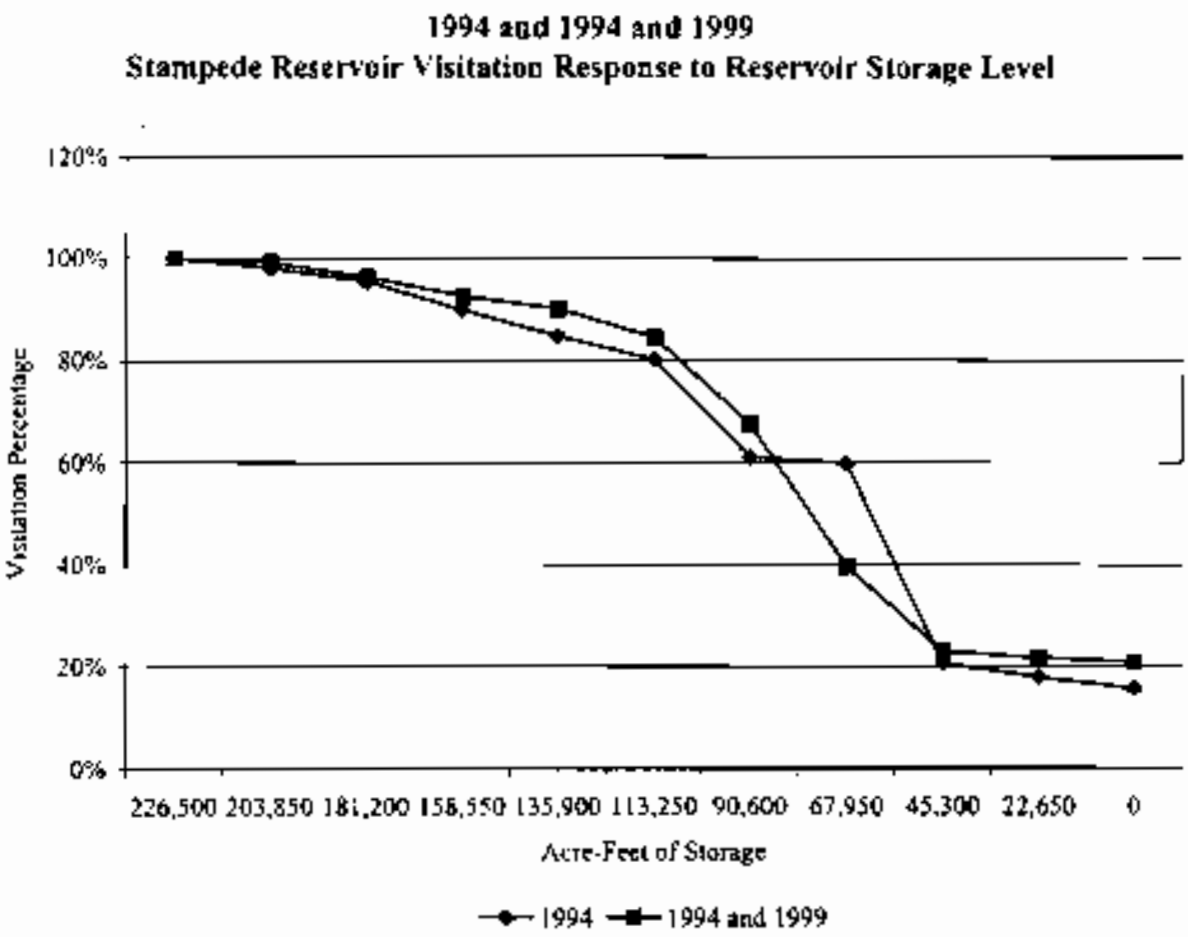
	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Average Visits by Visitor for Reservoir Storage Levels				
Level 1	3.11	3.03	3.08	5.55
Level 2	3.07	3.03	3.02	5.55
Level 3	2.94	2.94	2.94	5.06
Level 4	2.72	2.78	2.77	4.68
Level 5	2.57	2.59	2.61	4.03
Level 6		2.50	2.47	3.68
Level 7		2.16	1.88	2.90
Level 8		2.06	1.84	2.81
Level 9		0.47	0.63	1.84
Level 10		0.25	0.55	1.29
Level 11		0.25	0.48	0.26
Visitation Response for Reservoir Storage Levels				
Level 1	100.00%	100.00%	100.00%	100.00%
Level 2	98.71%	100.00%	98.05%	100.00%
Level 3	94.53%	97.03%	95.45%	91.17%
Level 4	87.46%	91.75%	89.94%	84.32%
Level 5	82.64%	85.48%	84.74%	72.61%
Level 6		82.51%	80.19%	66.31%
Level 7		71.29%	61.04%	52.25%
Level 8		67.99%	59.74%	50.63%
Level 9		15.51%	20.45%	33.15%
Level 10		8.25%	17.86%	23.24%
Level 11		8.25%	15.58%	4.68%
Visitors that Visit by Month				
April	20	8	19	24
May	35	15	41	53
June	71	26	86	69
July	103	35	83	75
August	96	33	97	78
September	44	17	43	51
October	16	11	21	29
Other Months	21	3	2	11
Total	406	148	392	390
Average Group Size of Camping Visitors	5.24	3.73	5.12	5.10
Average Group Size of Day Use Visitors	5.02	3.13	3.89	5.02

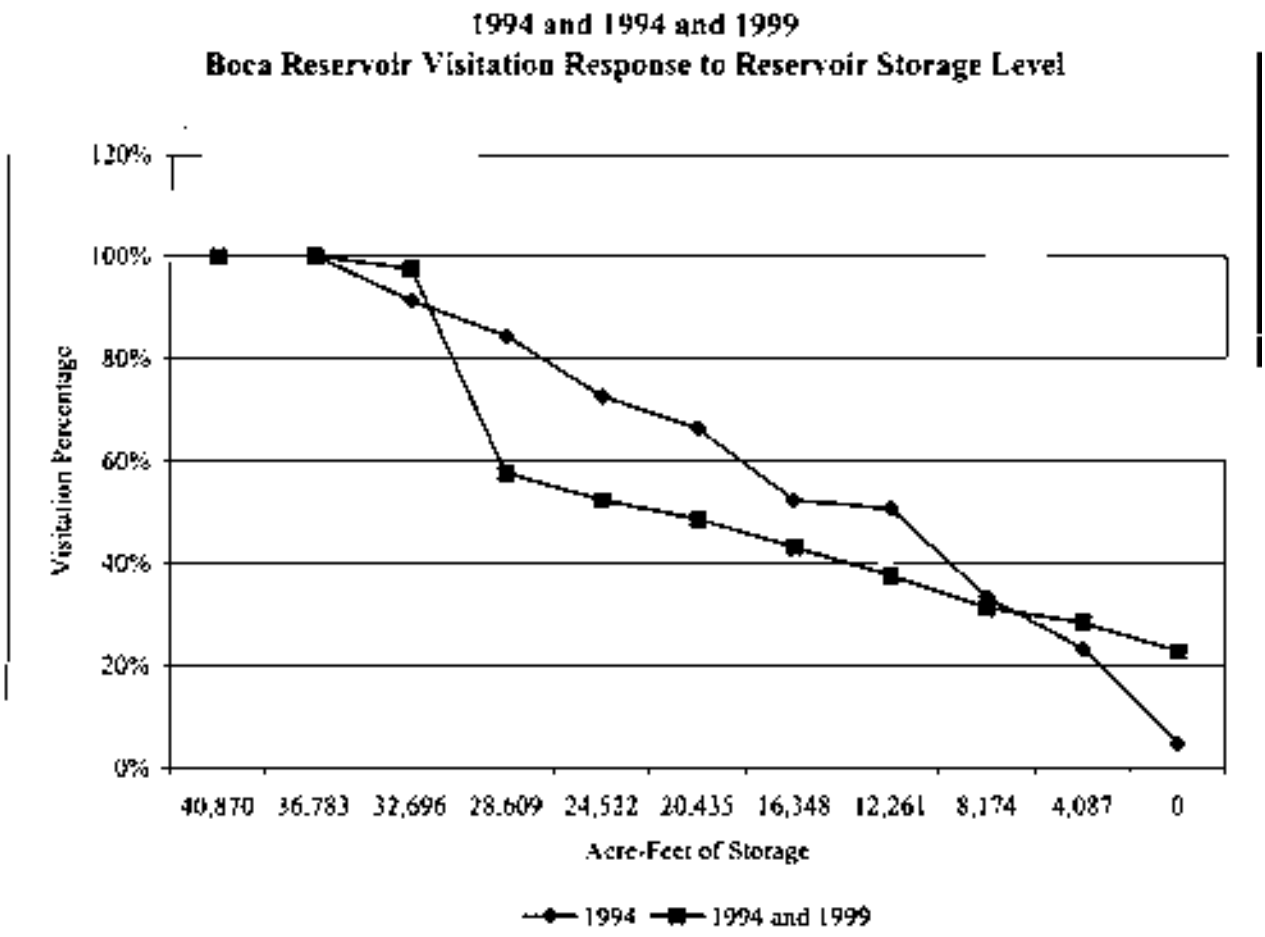
1994 and 1999 Visitation Response to the End of the Month Reservoir Storage Levels

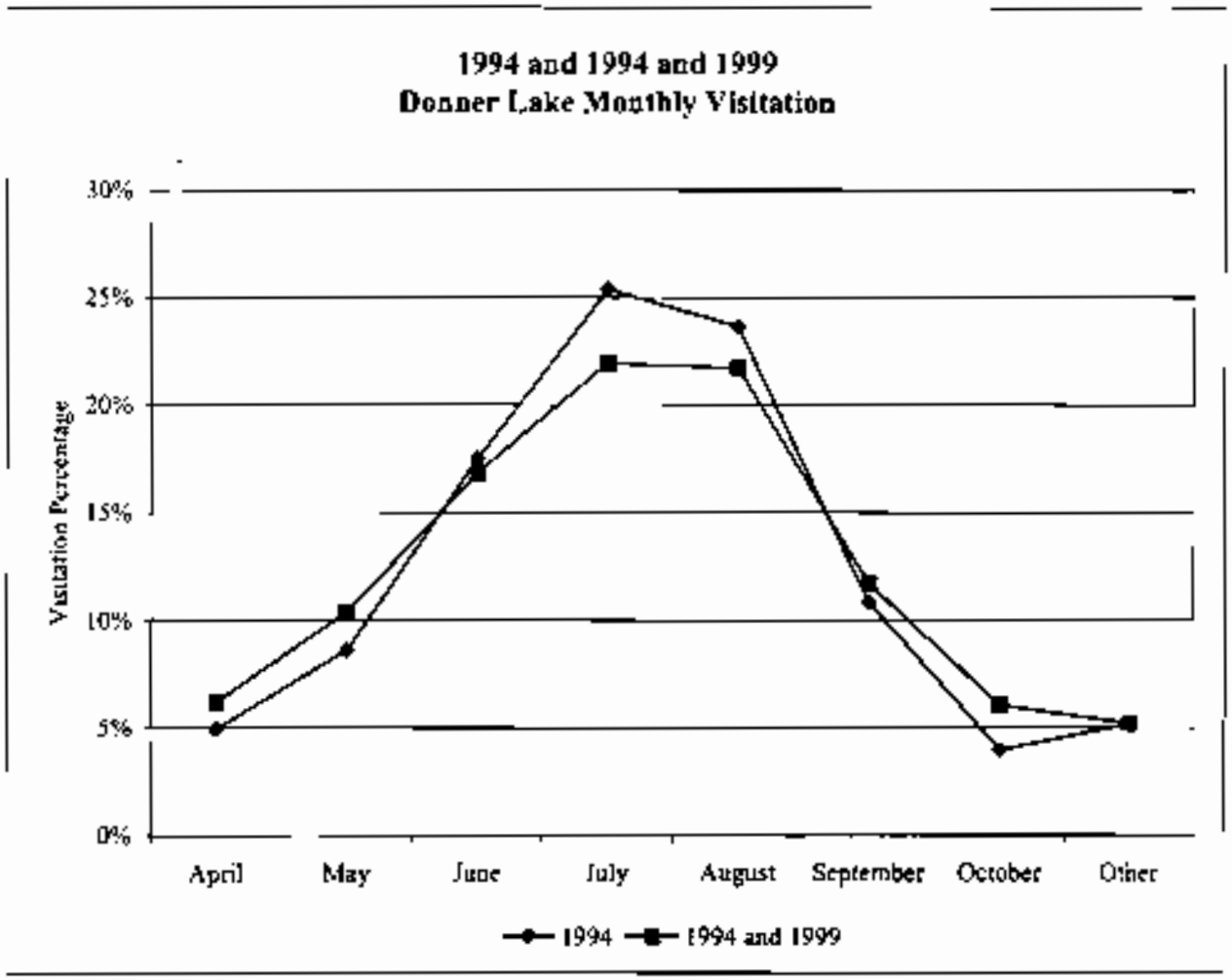
	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Average Visits by Visitors for Reservoir Storage Levels				
Level 1	5.89	3.74	3.20	6.22
Level 2	5.84	3.74	3.18	6.22
Level 3	4.65	3.64	3.09	6.06
Level 4	4.53	3.55	2.97	3.59
Level 5	4.46	3.34	2.89	3.25
Level 6		3.09	2.71	3.02
Level 7		2.90	2.16	2.68
Level 8		2.57	1.27	2.33
Level 9		1.69	0.73	1.94
Level 10		1.55	0.69	1.76
Level 11		1.55	0.66	1.42
Visitation Response for Reservoir Storage Levels				
Level 1	100.00%	100.00%	100.00%	100.00%
Level 2	99.20%	100.00%	99.16%	100.00%
Level 3	78.97%	97.29%	96.30%	97.40%
Level 4	76.84%	94.93%	92.61%	57.62%
Level 5	75.64%	89.36%	90.16%	52.29%
Level 6		82.50%	84.49%	48.56%
Level 7		77.49%	67.52%	43.06%
Level 8		68.64%	39.68%	37.45%
Level 9		45.19%	22.77%	31.12%
Level 10		41.48%	21.65%	28.20%
Level 11		41.48%	20.68%	22.74%
Visitors that Visit by Month				
April	76	44	69	71
May	128	70	135	138
June	207	96	217	196
July	270	116	234	231
August	267	113	244	226
September	144	75	152	158
October	74	47	78	77
Other Months	64	27	38	39
Total	1,230	588	1,167	1,136
Average Group Size of Camping Visitors	4.98	4.76	5.68	5.03
Average Group Size of Day Use Visitors	4.56	3.39	3.50	4.90

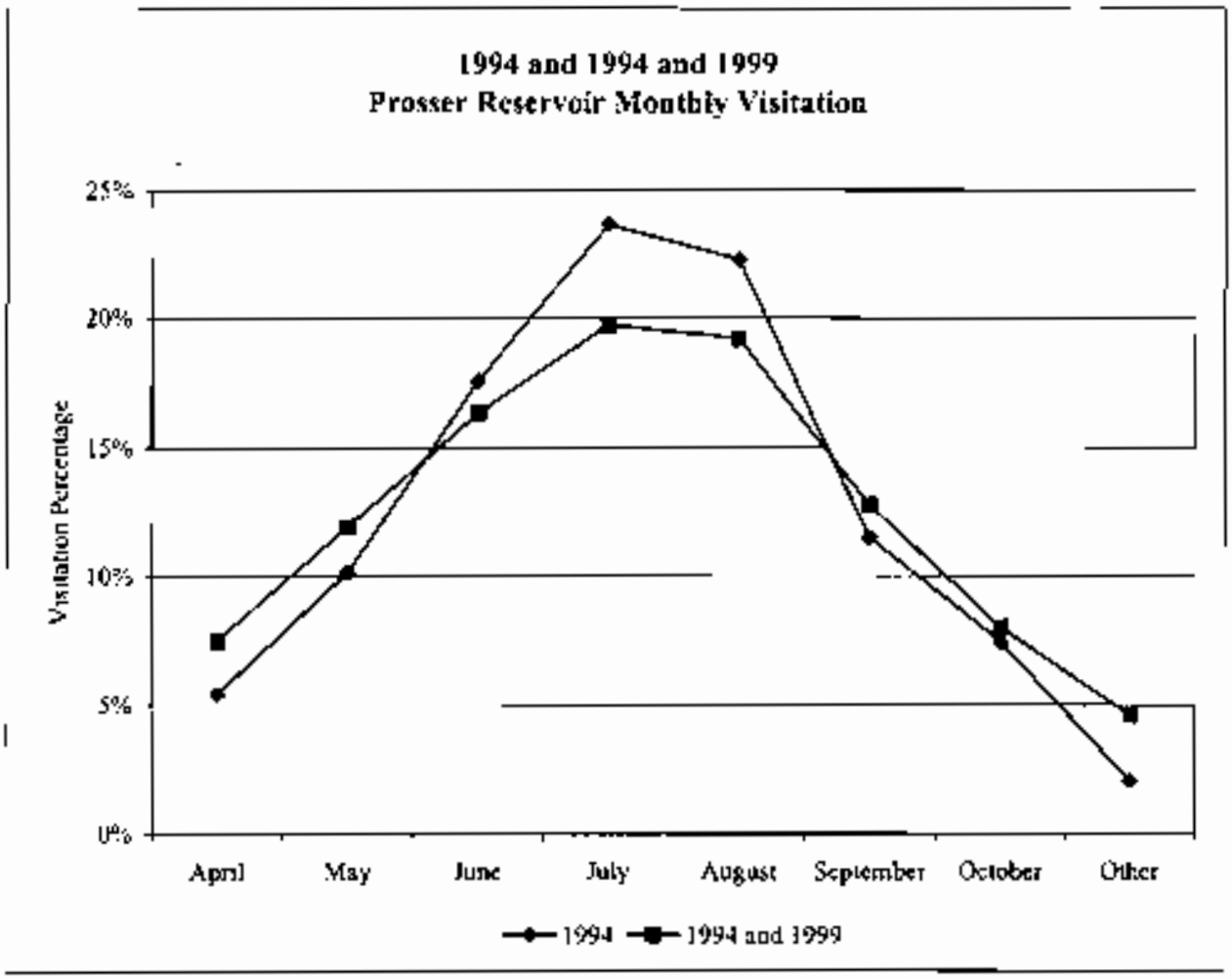

1994 and 1994 and 1999
Donner Lake Visitation Response to Reservoir Storage Level
120%
100%
80%
60%
40%
20%
0%
Visitation Percentage
9,660
8,694
7,728
6,762
5,796
Acre-Feet of Storage
1994
1994 and 1999

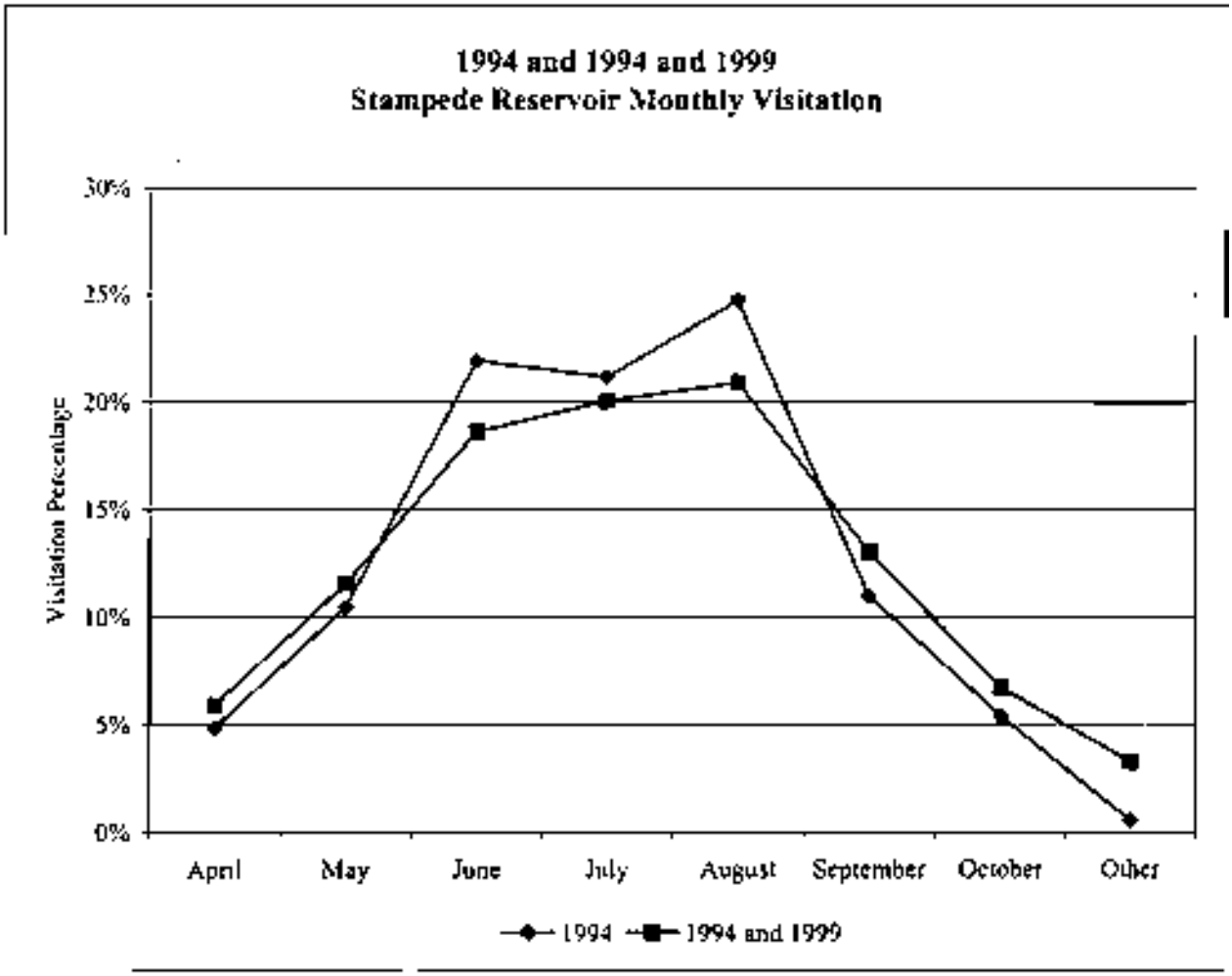

1994 and 1994 and 1999
Prosser Reservoir Visitation Response to Reservoir Storage Level
120%
100%
80%
60%
40%
20%
0%
Visitation Percentage
29,840
26,856
23,872
20,888
17,904
14,920
11,936
8,952
5,968
2,984
0
Acre-Feet of Storage
1994
1994 and 1999

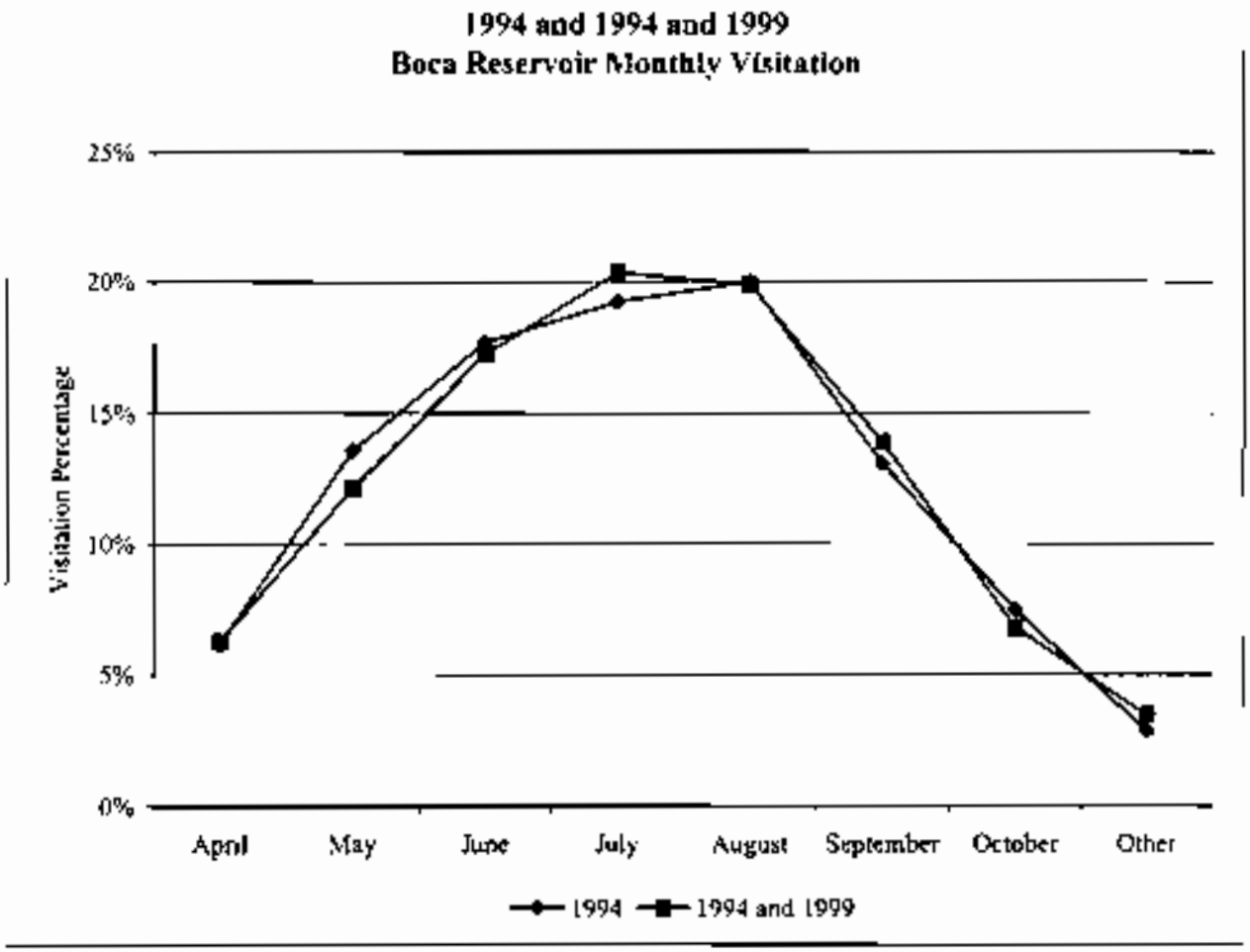

1994 and 1994 and 1999
Stampede Reservoir Visitation Response to Reservoir Storage Level
120%
100%
80%
60%
40%
20%
0%
Visitation Percentage
226,500
203,850
181,200
158,550
135,900
113,250
90,600
67,950
45,300
22,650
0
Acre-Feet of Storage
1994
1994 and 1999


1994 and 1994 and 1999
Boca Reservoir Visitation Response to Reservoir Storage Level
120%
100%
80%
60%
40%
20%
0%
Visitation Percentage
40,870
36,783
32,696
28,609
24,522
20,435
16,348
12,261
8,174
4,087
0
Acre-Feet of Storage
1994
1994 and 1999


1994 and 1994 and 1999
Donner Lake Monthly Visitation
30%
25%
20%
15%
10%
5%
0%
Visitation Percentage
April
May
June
July
August
September
October
Other
1994
1994 and 1999


1994 and 1994 and 1999
Prosser Reservoir Monthly Visitation
25%
20%
15%
10%
5%
0%
Visitation Percentage
April
May
June
July
August
September
October
Other
1994
1994 and 1999


1994 and 1994 and 1999
Stampede Reservoir Monthly Visitation
30%
25%
20%
15%
10%
5%
0%
Visitation Percentage
April
May
June
July
August
September
October
Other
1994
1994 and 1999


1994 and 1994 and 1999
Boca Reservoir Monthly Visitation
25%
20%
15%
10%
5%
0%
Visitation Percentage
April
May
June
July
August
September
October
Other
1994
1994 and 1999

1994 Camping Visitor Expenditures

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Camping Visitor Respondents	42	30	97	21
Expenditures by Category for Camping Visitor Groups				
Licenses	0.00	0.00	533.94	69.60
Camping Fees	2,045.82	623.10	4,231.19	434.01
Hotel or Motel	235.20	0.00	0.00	219.98
Restaurant	1,189.86	246.90	1,081.22	120.02
Groceries	2,392.32	1,840.80	5,872.95	2,030.03
Equipment and Supplies	0.00	0.00	497.64	1.60
Rental	25.20	0.00	0.00	3.06
Fuel	654.36	365.70	2,666.98	439.38
Other	1,065.12	418.50	3,766.40	688.05
Total	7,607.88	3,495.00	18,650.32	4,005.73
Average Expenditures by Category for Camping Visitor Groups				
Licenses	0.00	0.00	5.50	3.31
Camping Fees	48.71	20.77	43.62	20.67
Hotel or Motel	5.60	0.00	0.00	10.48
Restaurant	28.33	8.23	11.15	5.72
Groceries	56.96	61.36	60.55	96.67
Equipment and Supplies	0.00	0.00	5.13	0.08
Rental	0.60	0.00	0.00	0.15
Fuel	15.58	12.19	27.49	20.92
Other	25.36	13.95	38.83	32.76
Total	181.14	116.50	192.27	190.75

1994 and 1999 Camping Visitor Expenditures

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Camping Visitor Respondents	57	46	141	40
Expenditures by Category for Camping Visitor Groups				
Licenses	252.50	373.00	1,650.44	625.60
Camping Fees	2,962.82	1,202.10	9,179.19	1,295.01
Hotel or Motel	685.20	120.00	232.00	219.98
Restaurant	2,134.86	441.90	1,796.22	337.02
Groceries	4,172.32	3,145.80	21,522.95	4,625.03
Equipment and Supplies	0.00	0.00	497.64	1.60
Rental	587.20	1,500.00	1,400.00	3.06
Fuel	2,009.36	980.70	6,434.98	1,239.38
Other	2,072.12	1,143.50	5,451.40	1,738.05
Total	14,876.38	8,907.00	48,164.82	10,084.73
Average Expenditures by Category for Camping Visitor Groups				
Licenses	4.43	8.11	11.71	15.64
Camping Fees	51.98	26.13	65.10	32.38
Hotel or Motel	12.02	2.61	1.65	5.50
Restaurant	37.45	9.61	12.74	8.43
Groceries	73.20	68.39	152.65	115.63
Equipment and Supplies	0.00	0.00	3.53	0.04
Rental	10.30	32.61	9.93	0.08
Fuel	35.25	21.32	45.64	30.98
Other	36.35	24.86	38.66	43.45
Total	260.99	193.63	341.59	252.12

1994 Day Use Visitor Expenditures

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Day Use Visitor Respondents	71	8	9	54
Expenditures by Category for Day Use Visitor Groups				
Licenses	0.00	142.38	347.40	376.00
Camping Fees	165.64	0.00	0.00	292.80
Hotel or Motel	1,101.01	6.00	144.00	1,317.14
Restaurant	1,169.56	250.02	135.00	537.16
Groceries	1,510.37	250.02	201.60	1,408.56
Equipment and Supplies	351.30	27.00	33.84	230.40
Rental	956.38	975.00	0.00	0.00
Fuel	449.02	119.98	181.80	886.20
Other	323.15	50.00	13.50	292.80
Total	6,026.43	1,820.40	1,057.14	5,341.06
Average Expenditures by Category for Day Use Visitor Groups				
Licenses	0.00	17.80	38.60	6.96
Camping Fees	2.33	0.00	0.00	5.42
Hotel or Motel	15.51	0.75	16.00	24.39
Restaurant	16.47	31.25	15.00	9.95
Groceries	21.27	31.25	22.40	26.08
Equipment and Supplies	4.95	3.38	3.76	4.27
Rental	13.47	121.88	0.00	0.00
Fuel	6.32	15.00	20.20	16.41
Other	4.55	6.25	1.50	5.42
Total	84.88	227.55	117.46	98.91

1994 and 1999 Day Use Visitor Expenditures

	Donner Lake	Prosser Reservoir	Stampede Reservoir	Boca Reservoir
Day Use Visitor Respondents	158	18	38	97
Expenditures by Category for Day Use Visitor Groups				
Licenses	1,128.00	251.38	478.40	839.00
Camping Fees	446.64	40.00	0.00	344.80
Hotel or Motel	7,326.01	6.00	594.00	1,317.14
Restaurant	8,194.56	370.02	275.00	897.16
Groceries	9,476.37	365.02	1,036.60	2,401.56
Equipment and Supplies	351.30	27.00	33.84	230.40
Rental	6,338.38	975.00	0.00	495.00
Fuel	5,004.02	247.98	781.80	2,287.20
Other	8,219.15	80.00	144.50	462.80
Total	46,484.43	2,362.40	3,344.14	9,275.06
Average Expenditures by Category for Day Use Visitor Groups				
Licenses	7.14	13.97	12.59	8.65
Camping Fees	2.83	2.22	0.00	3.55
Hotel or Motel	46.37	0.33	15.63	13.58
Restaurant	51.86	20.56	7.24	9.25
Groceries	59.98	20.28	27.28	24.76
Equipment and Supplies	2.22	1.50	0.89	2.38
Rental	40.12	54.17	0.00	5.10
Fuel	31.67	13.78	20.57	23.58
Other	52.02	4.44	3.80	4.77
Total	294.21	131.24	88.00	95.62

Economic Impact Data

1992 Input-Output Model

	Output	Employment	Income
Response Coefficients by Economic Sector			
Trade	1.000000	0.000025	0.486901
Eating, Drinking, and Lodging	1.000000	0.000019	0.333658
Hotel, Gaming, and Recreation	1.000000	0.000019	0.322800
Multipliers by Economic Sector			
Trade			
Agricultural Services	0.000688	0.000698	0.000598
Construction	0.025872	0.008937	0.015332
Manufacturing	0.035469	0.011599	0.019209
Transportation and Communications	0.040344	0.018882	0.033230
Utilities	0.047485	0.011780	0.012234
Trade	1.000000	1.000000	1.000000
Eating, Drinking, and Lodging	0.029859	0.022308	0.020461
Finance, Insurance, and Real Estate	0.125998	0.056429	0.035896
Services	0.136308	0.156318	0.111003
Hotels, Gaming, and Recreation	0.019973	0.014906	0.013242
Health	0.042041	0.048697	0.036465
Local Government	0.030863	0.021641	0.023522
Households	0.643989	0.000000	0.000000
Total	2.178889	1.372393	1.321192
Eating, Drinking, and Lodging			
Agricultural Services	0.000463	0.000629	0.000587
Construction	0.021710	0.010038	0.018775
Manufacturing	0.035411	0.015499	0.027985
Transportation and Communications	0.025606	0.016040	0.030777
Utilities	0.063247	0.021002	0.023778
Trade	0.098805	0.132250	0.144185
Eating, Drinking, and Lodging	1.000000	1.000000	1.000000
Finance, Insurance, and Real Estate	0.090301	0.054131	0.037542
Services	0.089895	0.137987	0.106829
Hotels, Gaming, and Recreation	0.015286	0.015270	0.014789
Health	0.032152	0.050053	0.040695
Local Government	0.026586	0.024952	0.029568
Households	0.492864	0.000000	0.000000
Total	1.992325	1.477850	1.475510

	Output	Employment	Income
Hotel, Gaming, and Recreation			
Agricultural Services	0.000309	0.000419	0.000405
Construction	0.016401	0.007591	0.014661
Manufacturing	0.033883	0.014846	0.027678
Transportation and Communications	0.023467	0.014716	0.029155
Utilities	0.037630	0.012509	0.014623
Trade	0.052518	0.070371	0.079216
Eating, Drinking, and Lodging	0.016037	0.016054	0.016576
Finance, Insurance, and Real Estate	0.058075	0.034851	0.024956
Services	0.081097	0.124617	0.099615
Hotels, Gaming, and Recreation	1.000000	1.000000	1.000000
Health	0.063020	0.098214	0.082449
Local Government	0.061741	0.058010	0.070977
Households	0.471913	0.000000	0.000000
Total	1.916090	1.452200	1.460311

1995 Input-Output Model

	Output	Employment	Income
Response Coefficients by Economic Sector			
Trade	1.000000	0.000017	0.309423
Eating, Drinking, and Lodging	1.000000	0.000028	0.230676
Hotel, Gaming, and Recreation	1.000000	0.000017	0.161313
Multipliers by Economic Sector			
Trade			
Agricultural Services	0.000883	0.002420	0.001299
Construction	0.017765	0.010183	0.014377
Manufacturing	0.041472	0.015712	0.024032
Transportation and Communication	0.041887	0.022322	0.036292
Utilities	0.028947	0.004505	0.031434
Trade	1.000000	1.000000	1.000000
Eating, Drinking, and Lodging	0.009671	0.016018	0.007210
Finance, Insurance, and Real Estate	0.097642	0.030481	0.094694
Services	0.145976	0.157637	0.149537
Hotel, Gaming, and Recreation	0.028055	0.027583	0.014626
Health	0.047828	0.038549	0.054403
Local Government	0.000000	0.000000	0.000000
Households	0.442214	0.000000	0.000000
Total	1.902340	1.325410	1.427903
Eating, Drinking, and Lodging			
Agricultural Services	0.001036	0.001715	0.002045
Construction	0.021104	0.007304	0.022909
Manufacturing	0.086125	0.019701	0.066946
Transportation and Communication	0.040023	0.012878	0.046515
Utilities	0.042308	0.003975	0.061627
Trade	0.102040	0.061609	0.136874
Eating, Drinking, and Lodging	1.000000	1.000000	1.000000
Finance, Insurance, and Real Estate	0.098346	0.018536	0.127935
Services	0.130077	0.084811	0.178739
Hotel, Gaming, and Recreation	0.032243	0.019140	0.022548
Health	0.043524	0.021180	0.066408
Local Government	0.000000	0.000000	0.000000
Households	0.400400	0.000000	0.000000
Total	1.997225	1.250850	1.732544

	Output	Employment	Income
Hotel, Gaming, and Recreation			
Agricultural Services	0.002130	0.005937	0.006010
Construction	0.021289	0.012412	0.033048
Manufacturing	0.051770	0.019950	0.057545
Transportation and Communication	0.029439	0.015957	0.048926
Utilities	0.033504	0.005303	0.069786
Trade	0.062483	0.063552	0.119852
Eating, Drinking, and Lodging	0.008113	0.013666	0.011601
Finance, Insurance, and Real Estate	0.170256	0.054059	0.316716
Services	0.124980	0.137274	0.245579
Hotel, Gaming, and Recreation	1.000000	1.000000	1.000000
Health	0.066066	0.054160	0.144147
Local Government	0.000000	0.000000	0.000000
Households	0.331695	0.000000	0.000000
Total	1.901725	1.382270	2.053209

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