



Bulletin 132-89
December 1989

STANLEY D. GARDNER
The Resources Agency
Director

Management of the California State Water Project Appendix D Costs of Recreation and Fish and Wildlife Enhancement



Gordon K. Van Vleck

Secretary for Resources
The Resources Agency

George Deukmejian

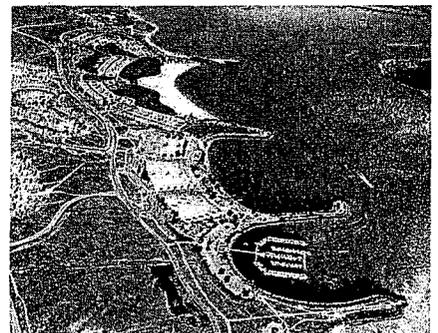
Governor
State of California

David N. Kennedy

Director
Department of Water Resources

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ON THE COVER: State Water Project
Recreation Facility at Lake Perris.

**Department of
Water Resources**

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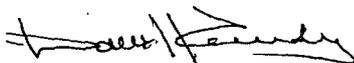
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Foreword

The Davis-Dolwig Act (Sections 11900-11925 of the California Water Code) declares that providing for the enhancement of fish and wildlife and for recreation in connection with State water projects benefits all of the people of California and that the costs attributable to such enhancement should be borne by them. The Act also provides a procedure through which the Department of Water Resources will be reimbursed for those project costs which are allocated to recreation and fish and wildlife enhancement and for costs of acquiring property for recreation development. The Department is to report such expenditures to the Legislature annually. If the Legislature approves the reported costs, a like amount of the State's tideland oil and gas revenues will be released to the Department from a continuing \$5,000,000 annual appropriation of tideland revenues which has been authorized specifically for that purpose (Public Resources Code Section 6217).

This constitutes the Department's 1989 report to the Legislature in compliance with the above requirement. An additional \$6,829,977 for recreation and fish and wildlife enhancement is reported herein. This amount consists of \$6,833,626 for joint capital costs of the State Water Project allocated to recreation and fish and wildlife enhancement, less \$3,649 for specific recreation land costs. The additional amount is mostly due to costs incurred in 1988 and interest accrued on recreation costs not yet reimbursed by the continuing annual appropriation.

The enactment of AB 1442 (Statutes of 1989, Chapter 716) will significantly affect the way the Department is reimbursed for those project costs addressed in this appendix. AB 1442 amends Section 11913 of, and adds Sections 12303, 12929.10, 12929.12, and 12929.13 to, the California Water Code. This legislation cancels (1) specified obligations of the General Fund to reimburse the State Water Project in 1989 the amount of \$181,769,000 for fish and wildlife enhancement and recreation and (2) the obligation of the project to reimburse the California Water Fund in an equal amount. AB 1442 also provides for automatic offset of future Davis-Dolwig expenditures against the remaining State Water Project debt to the California Water Fund. The effects of this legislation will be reflected in the Department's 1990 report to the Legislature (Appendix D to Bulletin 132-90).



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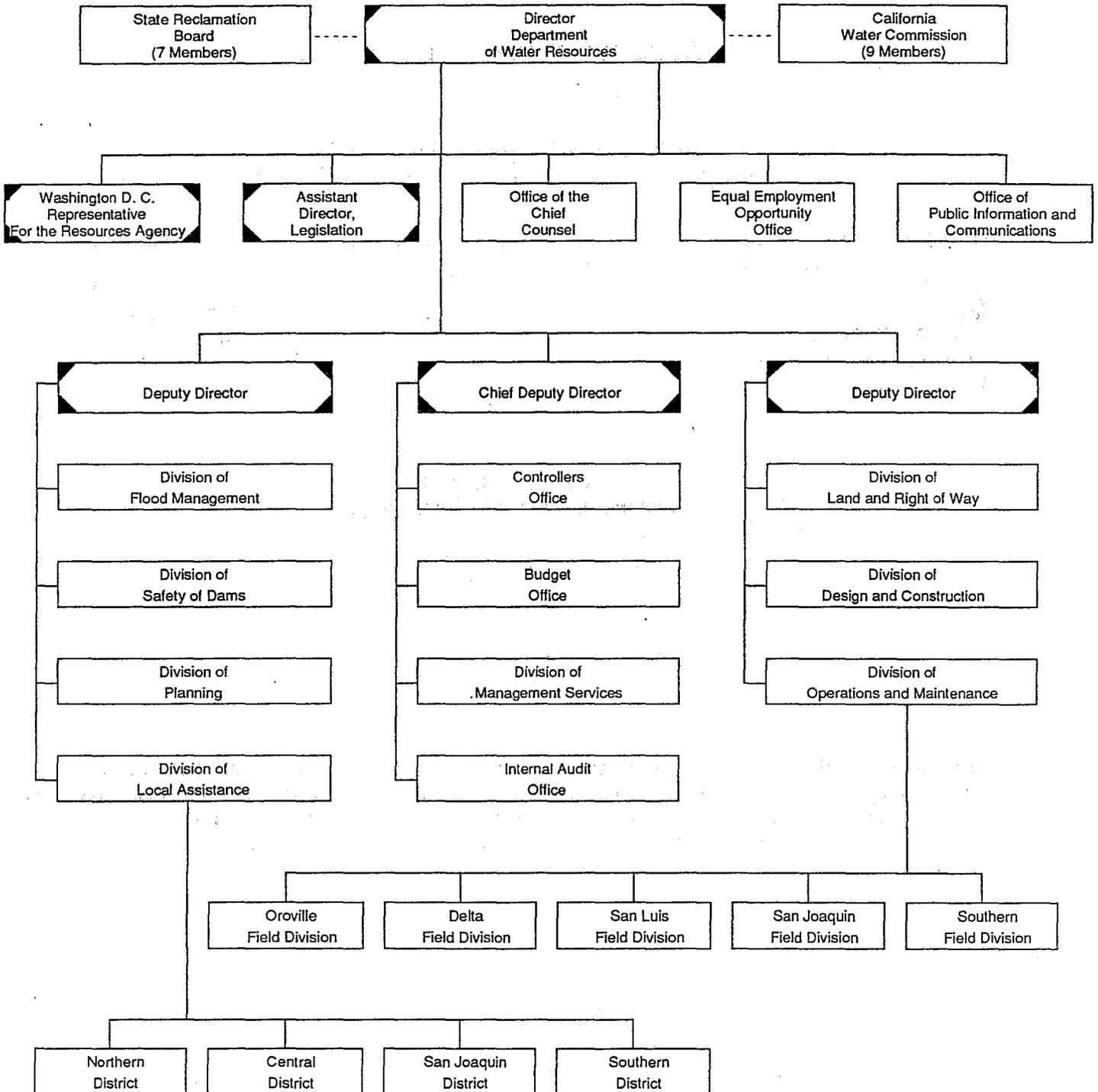
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The California Water Commission serves as a policy advisory body to the Director of Water Resources on all California water resources matters. The nine-member citizen commission provides a water resources forum for the people of the State, acts as a liaison between the legislative and executive branches of State Government, and coordinates federal, state, and local water resources efforts.

Organization of the Department of Water Resources



Reporting of Recreation and Fish and Wildlife Enhancement Costs

Section 11912 of the California Water Code assigns to the Department of Water Resources (Department) the following responsibilities:

It shall be the duty of the Department to report annually to the Legislature the costs, if any, which the Department has allocated to recreation and fish and wildlife enhancement for each facility of any state water project. The Department shall also report to the Legislature any revisions which the Department makes in such allocations.

The Department shall submit each such cost allocation to the Department of Navigation and Ocean Development (Department of Boating and Waterways), the Department of Parks and Recreation, and to the Department of Fish and Game. The Department of Navigation and Ocean Development, the Department of Parks and Recreation, and the Department of Fish and Game shall file with the Department of Water Resources their written comments with respect to each such cost allocation, which written comments shall be included in the report required by this section.

It shall also be the duty of the Department to report to the Legislature on any expenditure of funds for acquiring rights-of-way, easements and property pursuant to Section 346 for recreation development associated with such facilities....

This appendix is the Department's 1989 report, as required by Section 11912 of the California Water Code.

For brevity, "fish and wildlife enhancement" is hereafter referred to as "enhancement." The Department's (DWR) cost allocations treat recreation and enhancement as one combined purpose of the State Water Project (SWP).

Organization of Report

Capital costs of SWP facilities allocated by DWR to recreation and enhancement, through December 31, 1988, are shown in Table 1, pages 8 and 9. Table 1 also shows the expenditures for acquiring rights of way, easements, and property for recreation development associated with such facilities. Table 2 details the accrued interest charges included in the costs shown in Table 1.

The notes to Table 1, pages 10 through 12, explain DWR's procedures for reporting recreation and enhancement costs, describe how the amounts shown in the table are calculated, and reconcile significant changes from costs shown in previous reports.

The costs shown in Table 1 do not reflect new or revised allocations for any facility of the SWP. The derivation of allocation percentages indicated for joint capital costs of those multipurpose facilities listed in the upper portion of Table 1 have been described in previous reports. Copies of those descriptions are available upon request to DWR.

A summary of allocation percentages is shown in a separate table, along with illustrative allocation percentages for facilities not yet reported.

Included at the end of this report are comments by the Department of Boating and Waterways, the Department of Parks and Recreation, and the Department of Fish and Game.

Table 1. Recreation and Enhancement

(Reported to the California Legislature in
(in

Item	1952-1975	1976	1977	1978	1979	1980	1981	1982
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Joint Capital Costs Allocated to								
Frenchman Dam and Lake (78.5%)								
California Water Resources Development Bond Fund	102,997	0	0	0	0	0	0	0
All Other Funds	2,435,165	916	700	10,531	9,278	56,964	13,705	69,404
Subtotal	2,538,162	916	700	10,531	9,278	56,964	13,705	69,404
Antelope Dam and Lake (100%)								
California Water Resources Development Bond Fund	1,036,428	0	0	0	0	0	0	0
All Other Funds	3,944,438	1,731	1,348	18,514	16,099	61,303	4,516	88,787
Subtotal	4,980,866	1,731	1,348	18,514	16,099	61,303	4,516	88,787
Grizzly Valley Dam and Lake Davis (99.0%)								
California Water Resources Development Bond Fund	4,003,092	0	0	0	0	0	0	0
All Other Funds	688,474	22,115	8,197	78,430	45,879	92,353	10,325	51,133
Subtotal	4,691,566	22,115	8,197	78,430	45,879	92,353	10,325	51,133
Sisk Dam, San Luis Reservoir, O'Neill Forebay and Los Banos Reservoir (3.4%)								
California Water Resources Development Bond Fund	2,032,097	(130)	(118)	(56)	0	(2,078)	(1,419)	(35,272)
All Other Funds	1,394,158	4,870	5,660	(22,713)	(2,289)	19,269	8,384	281,990
Subtotal	3,426,255	4,740	5,542	(22,769)	(2,289)	17,191	6,965	246,718
California Aqueduct, Delta to Dos Amigos P.P. (3.4%)								
California Water Resources Development Bond Fund	4,467,667	0	0	0	0	0	0	0
All Other Funds	762,634	38,409	15,453	19,999	32,771	28,506	194,722	145,514
Subtotal	5,230,301	38,409	15,453	19,999	32,771	28,506	194,722	145,514
Oroville Division (2.9%)								
California Water Resources Development Bond Fund	5,725,390	(15)	(15)	(19)	(23)	(27)	(29)	(28)
All Other Funds	3,384,416	28,087	515,025	83,103	52,177	28,974	18,411	14,317
Subtotal	9,109,806	28,072	515,010	83,084	52,154	28,947	18,382	14,289
Del Valle Dam and Lake Del Valle (48.0%)								
California Water Resources Development Bond Fund	10,546,762	0	0	0	0	0	0	0
All Other Funds	2,283,633	9,976	3,656	9,324	33,333	35,871	23,936	24,576
Subtotal	12,830,395	9,976	3,656	9,324	33,333	35,871	23,936	24,576
California Aqueduct, Dos Amigos P.P. to Termini (5.7%)								
California Water Resources Development Bond Fund	48,622,489	59	57	(1,440)	(155)	3,473	2,382	59,123
All Other Funds	25,025,255	974,102	830,247	868,320	1,602,475	2,285,535	1,978,444	3,169,735
Subtotal	73,647,744	974,161	830,304	866,880	1,602,320	2,289,008	1,980,826	3,228,858
TOTAL	116,455,095	1,080,120	1,380,210	1,063,993	1,789,545	2,610,143	2,253,377	3,869,279
Specific Costs of Acquiring								
Frenchman Dam and Lake								
California Water Resources Development Bond Fund	3,379	0	0	0	0	0	0	0
All Other Funds	49,947	0	0	0	0	0	0	0
Subtotal	53,326	0	0	0	0	0	0	0
Grizzly Valley Dam and Lake Davis								
California Water Resources Development Bond Fund	204,116	0	0	0	0	0	0	0
All Other Funds	5,246	0	0	0	2,648	56,918	76,931	451,796
Subtotal	209,362	0	0	0	2,648	56,918	76,931	451,796
Abbey Bridge Dam and Reservoir								
California Water Resources Development Bond Fund	9	0	0	0	0	0	0	0
All Other Funds	9,921	0	0	0	0	0	0	0
Subtotal	9,930	0	0	0	0	0	0	0
Sisk Dam, San Luis Reservoir, O'Neill Forebay and Los Banos Reservoir								
California Water Resources Development Bond Fund	395,284	0	0	0	0	0	0	0
All Other Funds	208,290	692	729	1,075	56,049	126	107	278
Subtotal	603,574	692	729	1,075	56,049	126	107	278
California Aqueduct, Delta to Dos Amigos P.P.								
California Water Resources Development Bond Fund	461,086	0	0	0	0	0	0	0
All Other Funds	108,532	888	617	978	21,952	43,344	11,275	44,919
Subtotal	569,618	888	617	978	21,952	43,344	11,275	44,919
Oroville Division								
California Water Resources Development Bond Fund	7,810,006	(45)	(45)	(57)	(69)	(81)	(88)	(86)
All Other Funds	334,502	1,880	1,637	101,283	1,313	1,853	1,033	20,170
Subtotal	8,144,508	1,835	1,592	101,226	1,244	1,772	945	20,084
Del Valle Dam and Lake Del Valle								
California Water Resources Development Bond Fund	519,425	0	0	0	0	0	0	0
All Other Funds	(37,647)	44	88	707	262	389	314	292
Subtotal	481,778	44	88	707	262	389	314	292
California Aqueduct, Dos Amigos P.P. to Termini								
California Water Resources Development Bond Fund	478,971	0	0	0	0	0	0	0
All Other Funds	56,303	123	561	33,357	274,051	125,515	3,826	(11,992)
Subtotal	535,274	123	561	33,357	274,051	125,515	3,826	(11,992)
Castaic Dam and Lake								
California Water Resources Development Bond Fund	1,954,297	0	0	0	0	0	0	0
All Other Funds	267,017	10,841	18,589	49,662	113,056	469,435	9,145	3,357
Subtotal	2,221,314	10,841	18,589	49,662	113,056	469,435	9,145	3,357
Cedar Springs Dam and Silverwood Lake								
California Water Resources Development Bond Fund	424,966	0	0	0	0	0	0	0
All Other Funds	251,602	5,739	2,528	8,402	15,953	56,905	3,144	7,529
Subtotal	676,568	5,739	2,528	8,402	15,953	56,905	3,144	7,529
Perris Dam and Lake Perris								
California Water Resources Development Bond Fund	1,022,313	0	0	0	0	0	0	0
All Other Funds	3,769,387	15	0	84,460	206,806	879,590	0	(279)
Subtotal	4,791,700	15	0	84,460	206,806	879,590	0	(279)
TOTAL	18,296,952	20,177	24,704	279,867	692,021	1,633,994	105,687	515,984
Total Recreation and Enhancement Costs								
California Water Resources Development Bond Fund	89,810,774	(131)	(121)	(1,572)	(247)	1,287	846	23,737
All Other Funds	44,941,273	1,100,428	1,405,035	1,345,432	2,481,813	4,242,850	2,358,218	4,361,526
GRAND TOTAL	134,752,047	1,100,297	1,404,914	1,343,860	2,481,566	4,244,137	2,359,064	4,385,263

Cost of the State Water Project (a)

Response to Water Code Section 11912)
dollars)

1983	1984	1985	1986	1987	1988	Total	Interest	Total	Previous	Increase
[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]
Recreation and Enhancement: (b)										
0	0	0	0	0	0	102,997	1,903	104,900	104,900	0
64,497	2,489	39,556	4,700	20,338	10,508	2,738,751	0	2,738,751	2,709,605	29,146
64,497	2,489	39,556	4,700	20,338	10,508	2,841,748	1,903	2,843,651	2,814,505	29,146
0	0	0	0	0	0	1,036,428	103,939	1,140,367	1,140,367	0
42,172	47,466	85,010	21,299	9,714	4,357	4,346,754	0	4,346,754	4,340,068	6,686
42,172	47,466	85,010	21,299	9,714	4,357	5,383,182	103,939	5,487,121	5,480,435	6,686
0	0	0	0	0	0	4,003,092	441,502	4,444,594	4,444,594	0
27,800	21,533	8,250	14,853	125,669	1,130,646	2,325,657	0	2,325,657	1,184,754	1,140,903
27,800	21,533	8,250	14,853	125,669	1,130,646	6,328,749	441,502	6,770,251	5,629,348	1,140,903
(16,760)	(15,449)	(3,150)	(1,870)	(4,571)	(1,762)	1,949,462	297,194	2,246,656	2,248,322	(1,666)
137,093	65,106	23,627	21,349	22,691	17,813	1,977,008	0	1,977,008	1,954,067	22,941
120,333	49,657	20,477	19,479	18,120	16,051	3,926,470	297,194	4,223,664	4,202,389	21,275
0	0	0	0	0	0	4,467,667	799,684	5,267,351	5,267,351	0
59,759	86,127	41,935	26,770	283,966	175,850	1,912,415	0	1,912,415	1,727,894	184,521
59,759	86,127	41,935	26,770	283,966	175,850	6,380,082	799,684	7,179,766	6,995,245	184,521
(9)	0	0	0	(9)	0	5,725,216	1,835,409	7,560,625	7,560,625	0
17,718	18,207	17,354	36,523	6,197	13,224	4,233,733	0	4,233,733	4,222,026	11,707
17,709	18,207	17,354	36,523	6,188	13,224	9,958,949	1,835,409	11,794,358	11,782,651	11,707
0	0	0	0	0	0	10,546,762	5,953,867	16,500,629	16,500,629	0
78,104	165,197	43,631	15,632	39,368	14,292	2,780,529	0	2,780,529	2,752,876	27,653
78,104	165,197	43,631	15,632	39,368	14,292	13,327,291	5,953,867	19,281,158	19,253,505	27,653
28,096	25,903	5,286	3,141	7,662	2,953	48,759,029	70,475,173	119,234,202	114,232,117	5,002,085
2,327,382	1,482,479	809,863	554,126	423,365	548,561	42,879,889	0	42,879,889	42,470,239	409,650
2,355,478	1,508,382	815,149	557,267	431,027	551,514	91,638,918	70,475,173	162,114,091	156,702,356	5,411,735
2,765,852	1,899,058	1,071,362	696,523	934,390	1,916,442	139,785,389	79,908,671	219,694,060	212,860,434	6,833,626
Land for Recreation Development: (c)										
0	0	0	0	0	0	3,379	141	3,520	3,520	0
0	0	0	0	0	0	49,947	0	49,947	49,947	0
0	0	0	0	0	0	53,326	141	53,467	53,467	0
0	0	0	0	0	0	204,116	15,948	220,064	220,064	0
2,792	(203,509)	1,216	19,984	9,185	0	423,207	0	423,207	420,867	2,340
2,792	(203,509)	1,216	19,984	9,185	0	627,323	15,948	643,271	640,931	2,340
0	0	0	0	0	0	9	0	9	9	0
0	0	0	0	0	0	9,921	0	9,921	9,921	0
0	0	0	0	0	0	9,930	0	9,930	9,930	0
0	0	0	0	0	0	395,284	30,416	425,700	425,700	0
187	40	817	44,032	43,433	26,882	382,737	0	382,737	343,242	39,495
187	40	817	44,032	43,433	26,882	778,021	30,416	808,437	768,942	39,495
0	0	0	0	0	0	461,086	142,801	603,887	603,887	0
12,828	(55,443)	(44,376)	(77,137)	(54,566)	(20,234)	(6,423)	0	(6,423)	32,810	(39,233)
12,828	(55,443)	(44,376)	(77,137)	(54,566)	(20,234)	454,663	142,801	597,464	636,697	(39,233)
(26)	0	0	0	0	0	7,809,509	3,246,345	11,055,854	11,055,854	0
41,068	174,752	879	1,778	(2,356)	231	680,023	0	680,023	679,816	207
41,042	174,752	879	1,778	(2,356)	231	8,489,532	3,246,345	11,735,877	11,735,670	207
0	0	0	0	0	0	519,425	397,653	917,078	917,078	0
499	437	953	931	531	0	(32,200)	0	(32,200)	(32,319)	119
499	437	953	931	531	0	487,225	397,653	884,878	884,759	119
0	0	0	0	0	0	478,971	350,373	829,344	829,344	0
(13,190)	1,272	(5,007)	(5,658)	(6,402)	(3,540)	449,219	0	449,219	459,204	(9,985)
(13,190)	1,272	(5,007)	(5,658)	(6,402)	(3,540)	928,190	350,373	1,278,563	1,288,548	(9,985)
0	0	0	0	0	0	1,954,297	1,585,943	3,540,240	3,540,240	0
6,132	510	564	0	0	936	949,244	0	949,244	948,308	936
6,132	510	564	0	0	936	2,903,541	1,585,943	4,489,484	4,488,548	936
0	0	0	0	0	0	424,966	347,376	772,342	772,342	0
3,240	885	1,191	1,547	1,461	2,463	362,589	0	362,589	360,118	2,471
3,240	885	1,191	1,547	1,461	2,463	787,555	347,376	1,134,931	1,132,460	2,471
0	0	0	0	0	0	1,022,313	948,430	1,970,743	1,970,742	1
0	0	0	0	0	0	4,939,979	0	4,939,979	4,939,979	0
0	0	0	0	0	0	5,962,292	948,430	6,910,722	6,910,721	1
53,530	(81,056)	(43,763)	(14,523)	(8,714)	6,738	21,481,598	7,065,426	28,547,024	28,550,673	(3,649)
11,301	10,454	2,136	1,271	3,082	1,191	89,564,008	86,974,097	176,838,105	171,837,685	5,000,420
2,808,081	1,807,548	1,025,463	680,729	922,594	1,921,989	71,402,979	0	71,402,979	69,573,422	1,829,557
2,819,382	1,818,002	1,027,599	682,000	925,676	1,923,180	161,266,987	86,974,097	248,241,084	241,411,107	6,829,977

Notes to Table 1, Pages 8 and 9

a) AB 1442 (Statutes of 1989, Chapter 716) cancels (1) specified obligations of the General Fund to reimburse the State Water Project in 1989 the amount of \$181,769,000 for fish and wildlife enhancement and recreation and (2) the obligation of the project to reimburse the California Water Fund in an equal amount. AB 1442 also provides for automatic offset of future Davis-Dolwig expenditures against the remaining State Water Project debt to the California Water Fund. The effects of this legislation will be reflected in the Department's 1990 report to the Legislature (Appendix D to Bulletin 132-90).

b) Recreation and enhancement costs refer only to (1) multipurpose facility capital costs allocated to recreation, and (2) the capital costs of lands acquired for associated recreation development. These costs are budgeted by DWR from funds that are available for financing Project construction costs.

Recreation and enhancement costs not reported in Table 1 are budgeted by several State departments. These costs, financed by appropriations

from a variety of funds, are summarized in the table on this page.

Allocated operation, maintenance, power, and replacement (OMP&R) costs of multipurpose facilities are budgeted by DWR and financed by annual appropriations from the State General Fund. Capital costs (other than land acquisition costs), along with OMP&R costs of recreation facilities, are budgeted by the Department of Parks and Recreation. However, the costs of constructing boating facilities are budgeted by the Department of Boating and Waterways, and the costs of enhancement developments are budgeted by the Department of Fish and Game.

c) Joint capital costs allocated to recreation and enhancement are based on DWR's derivation, for each multipurpose facility, of the percentages of the total joint costs attributable to each included purpose. These derivations are based on the application of conventional cost allocation methods that weigh the estimated costs to be incurred and the benefits to be realized during a 50-year period of analysis. Allocated costs reflect the application of these percentages to the actual capital costs incurred for each facility, as accounted by DWR.

Type of Recreation and Enhancement Costs Not Reported in Table 1	General Fund Appropriations, Unless Otherwise Noted		
	1989-90(a)	1988-89(b)	Total 1962-63 thru 1989-90(c)
Allocated operation, maintenance, power, and replacement costs of multipurpose facilities	0(d)	0(d)	\$ 317,965,000
Capital costs of recreation developments	\$ 288,000	\$3,394,000	\$2,049,900,000(e/f)
Operation, maintenance, and replacement costs of recreation developments	\$8,468,000	\$8,255,000	\$1,721,482,000(g)

a) Amount in Governor's budget
b) 1988-89 budgeted amount.
c) Actual through 1987-88 plus a) and b).
d) No SWP operation and maintenance costs appropriated.
e) Amounts from State recreation bond funds and other State and federal recreation funds.
f) Includes \$1,236,000 from the Harbors and Watercraft Revolving Fund, and \$200,000 directly from the Highway Users Tax.
g) Operation, maintenance, power, and replacement costs are budgeted by the Department of Parks and Recreation; boating facility costs are budgeted by the Department of Boating and Waterways; and enhancement development costs are budgeted by the Department of Fish and Game.

Summary of Recreation Land Acquisitions (a)

(in acres)

Project Facility	Acquired (b)	To Be Acquired	Federal Lands (c)	Total
Frenchman Lake	719	0	0	719
Antelope Lake	1,342	0	0	1,342
Lake Davis	733	0	0	733
San Luis Reservoir and O'Neill Forebay	2,518	0	0	2,518
Oroville Division	2,993	0	212	3,205
Lake Del Valle	1,206	0	0	1,206
California Aqueduct (excluding reservoirs)	1,834(d)	-(e)	0	1,834
Castaic Lake	1,915	0	577	2,492
Silverwood Lake	3,223	0	0	3,223
Lake Perris	4,351	115	0	4,466
Total	20,834	115	789	21,738

a) Includes recreation lands for only those projects with an established recreation land use and acquisition plan.
 b) Costs of acquiring these lands are shown in Table 1.
 c) These lands are being leased from the federal government at a nominal cost to the State.
 d) Possession and control of a portion of these lands will be transferred to the Department of Fish and Game for use in the Department's Southern California wildlife mitigation program. When the transfer is made, the acreage will be reduced accordingly.
 e) Additional land needs are to be identified by future studies.

Costs allocated to recreation and enhancement generally are first reported in the year following the year in which construction of a facility is completed. However, these allocated costs may be subsequently changed by either the adjustment of accounted capital costs or the revision of allocation percentages.

d) Specific costs of acquiring land for recreation development are incurred by DWR under the authority of California Water Code Section 346. DWR purchases recreation land concurrently with other lands needed for multipurpose facilities, in order to (1) decrease the total land costs of the Project, and (2) acquire property in an orderly manner. Recreation lands acquired for each Project facility through September 30, 1988 are shown in the table above.

DWR reports the annual expenditure of Project funds for acquiring all recreation land in the year following the expenditure. The costs of such lands generally are established when acquired and are not affected by the allocation percentages for the associated multipurpose Project facility. How-

ever, the reported costs of certain lands may be subsequently revised due to (1) receipt of certain revenues (such as federal grants and miscellaneous income from rights of way sales), or (2) modification of the recreation land use plan.

The amounts to be reported in future years will include credits for any reduction in previously reported costs, together with interest income thereon. If recreation land is reclassified as multipurpose project land, the original purchase price, together with appropriate interest income, will be reported as a negative expenditure for specific land costs, and an appropriate amount will be added to joint capital costs allocated to recreation and enhancement for the associated facility.

Previously reported costs of acquiring land for recreation development included about \$1.1 million for land that was used to mitigate impacts to wildlife habitat in Southern California resulting from construction of the SWP. These lands were redesignated from recreation to Project (wildlife mitigation) purposes. The amounts reported herein include credits for the reduction in previously

reported costs, together with appropriate interest income thereon.

The costs of acquiring recreation land also include the salaries of DWR personnel engaged in recreation land acquisition activities, together with indirect costs distributed on the basis of direct salaries.

e) Interest accruals are calculated as shown in Table 2 (pages 14-15). Interest charges are accrued only on the portion of annual disbursements financed by the California Water Resources Development Bond Fund and cease when such disbursements, together with cumulative interest accruals thereon, have been reimbursed. Calculations are based on the weighted average interest costs of Burns-Porter and Water System Revenue bonds sold to date (4.613 percent for the bonds outstanding on June 30, 1989). This rate differs from the "Project Interest Rate" under SWP water supply contracts, in that interest costs on power revenue bond sales are not included and interest costs on water revenue bond sales are included.

DWR has sold Water System Revenue Bonds to finance additional multipurpose facilities. Interest accruals reported in Table 2 include a portion of the interest costs of these revenue bonds.

As of December 31, 1988, a total of \$90 million had been reimbursed to DWR under the continuing annual \$5 million appropriation (through fiscal year 1987-88) of State tideland oil and gas revenues, authorized by California Statutes of 1966, First Extraordinary Session, Chapter 27.

With no allowance for future interest, reported reimbursement of the costs would cover the annual appropriations in the full amounts for each fiscal year through fiscal year 2018-2019, together with \$3,241,084 of the appropriation for 2019-2020.

f) Costs previously reported are as shown in Table 1 (pages 8 and 9) of Appendix D to Bulletin 132-88. Such costs were based on DWR's accounting records as of December 31, 1987. The average interest cost on Burns-Porter bond sales was then 4.613 percent.

g) Reasons for cost increases are outlined below:

- Additional disbursements during 1988 for recreation lands and for joint capital costs allocated to recreation and enhancement: \$1,923,000
- Additional accrued interest on recreation costs not yet reimbursed by the continuing \$5 million annual appropriation due to an increase in the interest rate, changes in bond fund expenditures and an additional year of accrual (1988): \$5,000,000
- Adjustment to allocated costs for Del Valle Dam and Lake for legal work on claims related to Grizzly Valley Dam: \$14,000
- Adjustments to allocated costs for B.F. Sisk San Luis Dam, San Luis Reservoir, and O'Neill Forebay for costs of acquiring land for recreation for 1987: \$19,000
- Adjustments to recreation land costs for Delta to Dos Amigos for 1987: -\$158,000
- Adjustments to recreation land costs for Frenchman Dam and Lake for 1987: \$19,000
- Additional recreation land costs for Grizzly Valley Dam for 1987: \$13,000
- Adjustments to recreation land costs for Oroville Dam for 1987: -\$2,000
- Adjustments to recreation land costs for Antelope Dam and Lake for 1987: \$2,000

TOTAL INCREASE: \$6,830,000

Summary of Allocation Percentages

Each year DWR determines water contractor charges for the SWP based on allocations of costs among purposes of facilities used for more than a single purpose. These determinations are based on the percentages previously reported to and approved by the Legislature, as well as preliminary estimates for facilities not yet reported. These percentages are summarized in the following table:

(in percent of joint costs of the respective facilities)

Facilities of the State Water Project	Reimbursable Purposes	Nonreimbursable Purposes		
	Water Supply & Power Generation	Flood Control	Recreation & Fish and Wildlife Enhancement	Total
Capital Costs of Features Jointly Used				
Project Conservation Facilities				
Frenchman Dam and Lake (a)	21.5	0	78.5	100.0
Antelope Dam and Lake (a)	0	0	100.0	100.0
Grizzly Valley Dam and Lake Davis (a)	1.0	0	99.0	100.0
Oroville Division (a (b)	97.1	0	2.9	100.0
California Aqueduct, Delta to				
Dos Amigos Pumping Plant (a)	96.6	0	3.4	100.0
Delta Facilities (c)	86.0	0	14.0	100.0
Project Transportation Facilities				
Grizzly Valley Pipeline	100.0	0	0	100.0
North Bay Aqueduct (c)	100.0	0	0	100.0
South Bay Aqueduct:				
Del Valle Dam and Lake Del Valle (a)	25.2	26.8	48.0	100.0
Remainder of South Bay Aqueduct	100.0	0	0	100.0
California Aqueduct:				
California Aqueduct, Delta to				
Dos Amigos Pumping Plant (a)	96.6	0	3.4	100.0
California Aqueduct, Dos Amigos Pumping Plant to Termini				
excluding the Coastal Branch (a)	94.3	0	5.7	100.0
Coastal Branch	100.0	0	0	100.0
<p>a) Final percentages, subject to review as discussed on page 10.</p> <p>b) Percentages are applicable to Capital Costs of Features Jointly Used, minus Federal Flood Control Payments.</p> <p>c) Illustrative percentages only, assumed for current project financial and repayment analyses.</p> <p>Note: Percentages shown are those applicable to the costs of the facilities as accounted by the State, or, in the case of Federal-State joint-use facilities (San Luis Facilities), only the State's share of the total cost.</p>				

Table 2. Calculation of Interest Accruals on California

(in dollars)

		Joint Capital Costs Allocated to Recreation and Enhancement and								
Year	Item	Frenchman Dam and Lake	Antelope Dam and Lake	Grizzly Valley Dam and Lake Davis	Sisk Dam, San Luis Reservoir, O'Neill Forebay & Los Banos Reservoir	California Aqueduct Delta to Dos Amigos P.P.	Oroville Division	Del Valle Dam and Lake Del Valle	California Aqueduct Dos Amigos P.P. to Termini	Total
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
1952- 1984	Disbursements:									
	1. Calif. Water Resources Development Bond Fund	102,997	1,036,428	4,003,092	1,960,815	4,467,667	5,725,225	10,546,762	48,739,987	76,582,973
	2. All Other Funds	2,663,649	4,226,374	1,046,239	1,891,528	1,383,894	4,160,435	2,667,606	40,543,974	58,583,699
	Reimbursements:									
	1. Calif. Water Resources Development Bond Fund	104,900	1,140,367	4,444,594	2,259,893	5,267,351	7,560,635	16,500,629	1,075,594	38,353,963
2. All Other Funds	2,663,649	4,226,374	1,046,239	1,891,528	1,383,894	4,160,435	2,667,606	0	18,039,725	
	Interest Accruals	103,939	441,502	297,812		799,684	1,835,409	5,953,867	51,656,662	61,092,778
1985	Beginning of Year Balance to be Reimbursed:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(1,266)	0	(1)	0	99,323,055	99,321,788
	2. All Other Funds	0	0	0	0	0	0	0	40,543,974	40,543,974
	Disbursements During Year:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(3,150)	0	0	0	5,286	2,136
	2. All Other Funds	39,556	85,010	8,250	23,627	41,935	17,354	43,631	809,863	1,069,226
	Reimbursements During Year Applied To:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(4,416)	0	(1)	0	4,787,868	4,783,451
	2. All Other Funds	39,556	85,010	8,250	23,627	41,935	17,354	43,631	0	259,363
	End-of-Year Balance Without Interest for:									
1. Calif. Water Resources Development Bond Fund	0	0	0	0	0	0	0	0	94,540,473	
2. All Other Funds	0	0	0	0	0	0	0	0	41,353,837	
	Interest Accrual on Average Balance	0	0	(29)		0	0	0	4,471,462	4,471,433
1986	Beginning of Year Balance to be Reimbursed:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(29)	0	0	0	99,011,935	99,011,906
	2. All Other Funds	0	0	0	0	0	0	0	41,353,837	41,353,837
	Disbursements During Year:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(1,870)	0	0	0	3,141	1,271
	2. All Other Funds	4,700	21,299	14,853	21,349	26,770	36,523	15,632	554,126	695,252
	Reimbursements During Year Applied To:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	0	0	0	0	0	0
	2. All Other Funds	0	0	0	0	0	0	0	0	0
	End-of-Year Balance Without Interest for:									
1. Calif. Water Resources Development Bond Fund	0	0	0	(1,899)	0	0	0	0	99,015,076	
2. All Other Funds	4,700	21,299	14,853	21,349	26,770	36,523	15,632	41,907,963	42,049,089	
	Interest Accrual on Average Balance	0	0	(44)		0	0	0	4,567,493	4,567,449
1987	Beginning of Year Balance to be Reimbursed:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(1,943)	0	0	0	103,582,569	103,580,626
	2. All Other Funds	4,700	21,299	14,853	21,349	26,770	36,523	15,632	41,907,963	42,049,089
	Disbursements During Year:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(4,571)	0	(9)	0	7,662	3,082
	2. All Other Funds	20,338	9,714	125,669	22,691	283,966	6,197	39,368	423,365	931,308
	Reimbursements During Year Applied To:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	0	0	0	0	0	0
	2. All Other Funds	0	0	0	0	0	0	0	0	0
	End-of-Year Balance Without Interest for:									
1. Calif. Water Resources Development Bond Fund	0	0	0	(6,514)	0	(9)	0	0	103,590,231	
2. All Other Funds	25,038	31,013	140,522	44,040	310,736	42,720	55,000	42,331,328	42,980,397	
	Interest Accrual on Average Balance	0	0	(195)		0	0	0	4,778,441	4,778,246
1988	Beginning of Year Balance to be Reimbursed:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(6,709)	0	(9)	0	108,368,672	108,361,954
	2. All Other Funds	25,038	31,013	140,522	44,040	310,736	42,720	55,000	42,331,328	42,980,397
	Disbursements During Year:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(1,762)	0	0	0	2,953	1,191
	2. All Other Funds	10,508	4,357	1,130,646	17,813	175,850	13,224	14,292	546,561	1,915,251
	Reimbursements During Year Applied To:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	0	0	0	0	0	0
	2. All Other Funds	0	0	0	0	0	0	0	0	0
	End-of-Year Balance Without Interest for:									
1. Calif. Water Resources Development Bond Fund	0	0	0	(8,471)	0	(9)	0	0	108,371,625	
2. All Other Funds	35,546	35,370	1,271,168	61,853	486,586	55,944	69,292	42,879,889	44,895,648	
	Interest Accrual on Average Balance	0	0	0	(350)	0	0	0	4,999,115	4,998,765
1989	Beginning of Year Balance to be Reimbursed:									
	1. Calif. Water Resources Development Bond Fund	0	0	0	(8,821)	0	(9)	0	113,370,740	113,361,910
	2. All Other Funds	35,546	35,370	1,271,168	61,853	486,586	55,944	69,292	42,879,889	44,895,648
	Total	35,546	35,370	1,271,168	53,032	486,586	55,935	69,292	156,250,629	156,257,558
	Disbursements:									
	1. Calif. Water Resources Development Bond Fund	102,997	1,036,428	4,003,092	1,949,482	4,467,667	5,725,216	10,546,762	48,759,029	76,590,653
	2. All Other Funds	2,738,751	4,346,754	2,325,657	1,977,008	1,912,415	4,233,733	2,780,529	42,879,889	63,194,736
	Total	2,841,748	5,383,182	6,328,749	3,926,470	6,380,082	9,958,949	13,327,291	91,638,918	139,785,389
	Reimbursements:									
	1. Calif. Water Resources Development Bond Fund	104,900	1,140,367	4,444,594	2,255,477	5,267,351	7,560,634	16,500,629	5,863,462	43,137,414
2. All Other Funds	2,703,205	4,311,384	1,054,489	1,915,155	1,425,829	4,177,789	2,711,237	0	18,299,088	
Total	2,808,105	5,451,751	5,499,083	4,170,632	6,693,180	11,738,423	19,211,866	5,863,462	61,436,502	
	Total Interest Accruals 1952 through 1988	1,903	103,939	441,502	297,194	799,684	1,835,409	5,953,867	70,475,173	79,908,671

Water Resources Development Bond Fund Disbursements

@ 4.613% per annum)

Specific Costs of Acquiring Land for Recreation Development

Frenchman Dam and Lake	Grizzly Valley Dam and Lake Davis	Abbey Bridge Dam and Reservoir	Sisk Dam, San Luis Reservoir, O'Neill Forebay & Los Banos Reservoir	California Aqueduct Delta to Dos Amigos P.P.	Oroville Division	Del Valle Dam and Lake Del Valle	California Aqueduct Dos Amigos P.P. to Termini	Castaic Dam and Lake	Cedar Springs Dam and Silverwood Lake	Perris Dam and Lake Perris	Total	GRAND TOTAL
[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
3,379	204,116	9	395,284	461,086	7,809,509	519,425	478,971	1,954,297	424,966	1,022,313	13,273,355	89,856,328
49,947	392,822	9,921	267,573	189,890	679,491	(34,615)	469,826	947,744	355,927	4,939,979	8,268,505	66,852,204
3,520	220,064	9	425,700	603,887	11,055,857	917,078	829,344	3,540,212	772,332	1,969,804	20,337,807	58,691,770
49,947	392,822	9,921	267,573	189,890	679,491	(34,615)	469,826	947,744	355,927	4,939,979	8,268,505	26,308,230
141	15,948	0	30,416	142,801	3,246,345	397,653	350,373	1,585,942	347,376	948,406	7,065,401	68,158,179
0	0	0	0	0	(3)	0	0	27	10	915	949	99,322,737
0	0	0	0	0	0	0	0	0	0	0	0	40,543,974
0	0	0	0	0	0	0	0	0	0	0	0	2,136
0	1,216	0	817	(44,376)	879	953	(5,007)	564	1,191	0	(43,763)	1,025,463
0	0	0	0	0	(3)	0	0	27	10	915	949	4,784,400
0	1,216	0	817	(44,376)	879	953	(5,007)	564	1,191	0	(43,763)	215,600
0	0	0	0	0	0	0	0	0	0	0	0	94,540,473
0	0	0	0	0	0	0	0	0	0	0	0	41,353,837
0	0	0	0	0	0	0	0	1	0	21	22	4,471,455
0	0	0	0	0	0	0	0	0	0	0	0	22
0	0	0	0	0	0	0	0	0	0	0	0	99,011,928
0	0	0	0	0	0	0	0	0	0	0	0	41,353,837
0	0	0	0	0	0	0	0	0	0	0	0	1,271
0	19,984	0	44,032	(77,137)	1,778	931	(5,658)	0	1,547	0	(14,523)	680,729
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	21	22	99,013,199
0	19,984	0	44,032	(77,137)	1,778	931	(5,658)	0	1,547	0	(14,523)	42,034,566
0	0	0	0	0	0	0	0	0	0	1	1	4,567,450
0	0	0	0	0	0	0	0	1	0	22	23	103,580,649
0	19,984	0	44,032	(77,137)	1,778	931	(5,658)	0	1,547	0	(14,523)	42,034,566
0	0	0	0	0	0	0	0	0	0	0	0	3,082
0	9,185	0	43,433	(54,566)	(2,356)	531	(6,402)	0	1,461	0	(8,714)	922,594
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	22	23	103,583,731
0	29,169	0	87,465	(131,703)	(578)	1,462	(12,060)	0	3,008	0	(23,237)	42,957,160
0	0	0	0	0	0	0	0	0	0	1	1	4,778,247
0	0	0	0	0	0	0	0	1	0	23	24	108,361,978
0	29,169	0	87,465	(131,703)	(578)	1,462	(12,060)	0	3,008	0	(23,237)	42,957,160
0	0	0	0	0	0	0	0	0	0	0	0	1,191
0	0	0	26,882	(20,234)	231	0	(3,540)	936	2,463	0	6,738	1,921,989
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	23	24	108,363,169
0	29,169	0	114,347	(151,937)	(347)	1,462	(15,600)	936	5,471	0	(16,499)	44,879,149
0	0	0	0	0	0	0	0	0	0	1	1	4,998,766
0	0	0	0	0	0	0	0	1	0	24	25	113,361,935
0	29,169	0	114,347	(151,937)	(347)	1,462	(15,600)	936	5,471	0	(16,499)	44,879,149
0	29,169	0	114,347	(151,937)	(347)	1,462	(15,600)	937	5,471	24	(16,474)	158,241,084
3,379	204,116	9	395,284	461,086	7,809,509	519,425	478,971	1,954,297	424,966	1,022,313	13,273,355	89,864,008
49,947	423,207	9,921	382,737	(6,423)	680,023	(32,200)	449,219	949,244	362,589	4,939,979	8,208,243	71,402,979
53,326	627,323	9,930	778,021	454,663	8,489,532	487,225	928,190	2,903,541	787,555	5,962,292	21,481,598	161,266,987
3,520	220,064	9	425,700	603,887	11,055,854	917,078	829,344	3,540,239	772,342	1,970,719	20,338,756	63,476,170
49,947	394,038	9,921	268,390	145,514	680,370	(33,662)	464,819	948,308	357,118	4,939,979	8,224,742	26,523,830
53,467	614,102	9,930	694,090	749,401	11,736,224	883,416	1,294,163	4,488,547	1,129,460	6,910,698	28,563,498	90,000,000
141	15,948	0	30,416	142,801	3,246,345	397,653	350,373	1,585,943	347,376	948,430	7,065,426	86,974,097

**Comments by
The Department of Boating and Waterways
The Department of Parks and Recreation
and
The Department of Fish and Game**

Memorandum

To : Honorable David N. Kennedy
Director
Department of Water Resources
1416 9th Street, A-36

Date : FEB 27 1990

Subject: Cost Allocations,
Recreation & Fish & Wildlife
Enhancement, State Water Project

From : Department of Boating and Waterways

The Department of Boating and Waterways has reviewed the subject report in accordance with California Water Code Section 11912 and we have no comment.


WILLIAM H. IVERS
Director

Memorandum

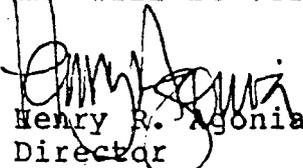
Date : FEB 15 1990

To : Honorable David N. Kennedy, Director
Department of Water Resources

From : Department of Parks and Recreation

Subject: Annual Report to the Legislature
Cost Allocations to Recreation and
Fish and Wildlife Enhancement
State Water Project

In accordance with California Water Code Section 11912, the Department of Parks and Recreation has reviewed your Bulletin 132-89 (Cost of Recreation and Fish and Wildlife Enhancement) Appendix D. The report appears consistent with those presented in previous years. Since it would take a great deal of research and staff time to verify your allocations, we will assume the figures to be correct and will be verified at a later date by an audit.


Henry R. Agonia
Director

AY:CS:fdg

Memorandum

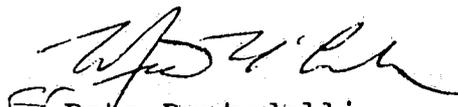
To : Mr. David N. Kennedy, Director
Department of Water Resources
1416 Ninth Street
Sacramento, CA 95814

February 9, 1990

From : Department of Fish and Game

Subject : Department of Water Resources Bulletin 132-89, Appendix D -
Costs of Recreation and Fish and Wildlife Enhancement

Thank you for the opportunity to review the referenced document.
My staff has reviewed the report and finds that we have no
comments.


Pete Bontadelli
Director

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