

Public Utilities Commission—Continued

Transportation Rate Fund Condition. It is estimated that as of July 1, 1967, the Transportation Rate Fund will have an accumulated surplus of \$2,388,653; that revenues amounting to \$4,651,875 will be added to the fund during fiscal year 1967-68. Funds collected will not quite equal proposed budget expenditures for the fiscal year.

RESOURCES AGENCY

ITEM 196 of the Budget Bill

Budget page 653

FOR SUPPORT OF THE RESOURCES AGENCY
FROM THE GENERAL FUND

Amount requested in Budget Bill-----		\$149,454
Budget request before identified adjustments-----	\$159,958	
Increase to recognize full workload change-----	6,102	
Budget as adjusted for workload change-----	\$166,060	
Adjustment—undetailed reduction (10 percent)-----	16,606	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET___ Unresolved

GENERAL PROGRAM STATEMENT

The Resources Agency was established by Chapter 2037, Statutes of 1961. Under the direction of the administrator, it provides overall coordination and guidance in behalf of the Governor over the resources programs of the state. Included in the agency are the Departments of Water Resources, Parks and Recreation, Harbors and Watercraft, Conservation, Fish and Game and a number of boards and commissions. The agency is also directly involved in allocating certain federal grant money and in administering a number of new state programs.

ANALYSIS AND RECOMMENDATIONS

Shown below is the expenditure level for the Resources Agency for the five-year period including next fiscal year.

Resources Agency—Total Expenditures					
Source of funding	1963-64	1964-65	1965-66	1966-67†	1967-68†
General Fund -----	\$91,457	\$120,166	\$125,595	\$167,685	\$166,060*
Federal funds -----				178,000	84,254
Sacramento-San Joaquin Delta Recreation Study ---	39,715	39,551	35,960	--	--
Total -----	\$131,172	\$159,717	\$161,555	\$345,685	\$250,314

† Estimated for 1966-67 and 1967-68.

* Workload budget figure before 10 percent reduction.

From the table above it is evident that the Resources Agency has grown substantially since its organization in 1961. The staff now consists of the administrator, an assistant administrator, a senior planner, a coordinator for federal reports, plus four secretaries. From time to time in the past the administrator has borrowed the services of personnel from the constituent departments without reimbursing the departments. In addition, the assistant director-controller of the Department of Conservation has been used as the agency fiscal officer.

Resources Agency—Continued

A number of bills passed in recent years have authorized the administrator's office to assume a number of operating functions, particularly in new recreational programs. The administrator is also the state official administratively designated by the Governor to allocate federal grant funds available to the state under the Federal Land and Water Conservation Fund Act, amounting to approximately \$4,000,000 per year. During the current year \$178,000 of that money is being expended through the administrator's office by contract with the individual departments.

With the staffing increases in the administrator's office and the borrowing of departmental staff the trend has been toward the assumption of certain departmental responsibilities in the administrator's office. Recently the administrator has presented his own individual views to the Legislature on many important issues without coordinating with the line departments or statutory boards and commissions which have the responsibility and authority to conduct the functions involved. As a result the broad policy coordination and direction of the departments within the agency has decreased and instead increasing emphasis has been placed on establishing the administrator's own policies and programs for the constituent departments.

The new administration has expressed an intention to utilize the administrator's office as an extension of the Governor's office and as a coordinator of programs and policies in behalf of the Governor. If this is done some of the staff in the administrator's office may not be needed and a more efficient operation may occur if the administrator's office does not become involved in duplicating certain supervisory functions of the statutory departments in the agency. Since the new administration is proposing a revision in the organization and perhaps in the role of the Resources Agency, we are deferring any recommendation on the Resources Agency.

DEPARTMENT OF CONSERVATION

ITEM 197 of the Budget Bill

Budget page 655

FOR SUPPORT OF THE DEPARTMENT OF CONSERVATION
FROM THE GENERAL FUND

Amount requested in budget bill		\$31,474,457
Budget request before identified adjustments	\$33,652,055	
Increase to recognize full workload change	1,319,564	
Budget as adjusted for workload change	\$34,971,619	
Adjustment—undetailed reduction (10 percent)	3,497,162	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET \$2,104,524

BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING \$1,392,638

Summary of Recommended Reductions

	Amount	Budget	
		Page	Line
1. Delete 12 soil conservationist positions	\$145,416	667	24
2. Delete funds for Pleasanton Plant Materials Center	32,230	667	44
3. Delete watershed planning augmentation	64,259	655	27
4. Delete printing funds and related draftsmen and temporary help positions for Division of Mines and Geology	28,094	655	27

Department of Conservation—Continued

	Amount	Budget	
		Page	Line
5. Reduce air attack, Division of Forestry-----	400,000	655	27
6. Reduce fire stations, Division of Forestry-----	1,306,630	659	72
7. Delete 2 civil engineering positions, Division of Forestry	33,566	655	27
8. Delete incentive pay for inmates-----	94,829	655	27

Other Recommendations

1. Reimburse General Fund for work performed on subdivision applications----- Analysis page 697
2. Shift geologic hazards work from Department of Water Resources to Division of Mines and Geology----- Analysis page 698
3. Reconcile Forest Practices Act and timber tax exemptions-- Analysis page 700
4. Transfer Watershed Management Program from Department of Water Resources to Department of Conservation----- Analysis page 701
5. Establish policy of General Fund financing for fire protection on private lands----- Analysis page 708
6. Withdraw local fire protection services in Fresno County----- Analysis page 711
7. Terminate Oak Glen Job Corps Conservation Camp----- Analysis page 713

GENERAL PROGRAM STATEMENT

The Department of Conservation exercises the state's responsibilities for the protection and development of certain wildland, mineral and soil resources in the state. The department includes the Divisions of Forestry, Mines and Geology, Oil and Gas, and Soil Conservation, with service functions such as personnel and fiscal matters furnished for these divisions by the administrative staff to the director. The Division of Forestry is the largest division and is responsible for about 90 percent of the department's expenditures. Almost all of the division's effort is directed toward fire-protection services for the privately owned wildlands of the state. The Division of Soil Conservation provides services for and makes local assistance grants to soil conservation districts; the Division of Mines and Geology develops and presents geologic information about the terrain and mineral resources of the state; and the Division of Oil and Gas regulates oil and gas drilling operations, publishes data about the industry's production and regulates drilling of geothermal energy wells.

Policies for the administration of the Divisions of Forestry, Mines and Geology, and Soil Conservation are established by the Board of Forestry, the State Mining and Geology Board and the Soil Conservation Commission, all of whose members are appointed by the Governor. Statutory responsibilities for the department appear in Divisions 1, 2, 3, 4 and 9 of the Public Resources Code.

The table below indicates the increase in expenditures by the department over a five-year period. In addition to increases for salary increments and operating expenses, the department has funded the following increases in the Division of Forestry during the five-year period: (1) a decrease in the length of the duty week from 104 hours to 96 hours for permanent fire control personnel during the fire season, (2) more extensive use of air tankers and more expensive retardants for the air attack program, (3) additional conservation camps and (4) a higher equipment replacement cost as well as added costs for additional and more elaborate equipment for fire control.

Department of Conservation—Support Expenditures

<i>Source of Funding</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67 *</i>	<i>1967-68 *</i>
General Fund (Includes emergency fire suppression allocations as shown in parentheses) -----	\$28,049,492	\$31,870,080	\$33,908,919	\$36,756,335	\$34,417,912
	(506,419)	(1,745,273)	(1,457,674)	(1,300,000)	(200,000)
Petroleum and Gas Fund -----	854,618	918,386	943,571	1,035,695	1,049,305
Subsidence Abatement Fund -----	92,290	90,863	96,153	109,853	112,589
Federal funds (Clarke-McNary Act) -----	1,118,275	1,115,000	1,076,080	1,038,522	1,038,522
Total expenditures as shown in Governor's Budget -----	\$30,114,675	\$33,994,329	\$36,024,723	\$38,940,405	\$36,618,328
Other expenditures—reimbursed -----	5,610,743	6,305,917	7,416,853	8,377,213	8,234,564
Total budgeted expenditures -----	\$35,725,418	\$40,300,246	\$43,441,576	\$47,317,618	\$44,852,892
Schedule C funds † -----	1,464,448	1,788,198	2,099,209	2,378,359	2,675,000
Total expenditures -----	<u>\$37,189,866</u>	<u>\$42,088,444</u>	<u>\$45,540,785</u>	<u>\$49,695,977</u>	<u>\$47,527,892</u>

* Estimated. The General Fund amount for 1967-68 is the net amount after the 10 percent reduction.

† Local expenditures for local fire control services performed by the state.

Department of Conservation—Continued

The substantial amount of reimbursements shown in the table are mostly for local fire contract services performed by the Division of Forestry, services to employees, payments from the federal government for state protection of public domain lands, payments from the Department of Parks and Recreation for the services of inmates, and payment from the federal government for the state operation of the Oak Glen Job Corps Conservation Center. The Schedule C funds are for local fire protection services and purchases initiated and paid for by the county or fire district but directed by the local Division of Forestry fire control officer.

The original General Fund support request in the Governor's Budget is \$37,905,002. To that figure has been added \$1,491,036 to recognize workload change. From the total of \$39,396,038 a 10 percent reduction of \$3,939,604 has been taken to arrive at the net General Fund appropriation of \$35,456,434 being requested in this and following items. The request for \$35,456,434 compares to estimated General Fund expenditures of \$37,794,857 in the current year, a decrease of \$2,338,423 or 6.2 percent. The decrease in the proposed budget is less than indicated since \$1,100,000 in unbudgeted Emergency Fund expenditures was added for fire suppression during the past fire season. The Division of Oil and Gas is supported from special funds and is requesting appropriations of \$1,161,894. The total departmental appropriation request for support from all funds is \$36,618,328.

Most of the workload increases involve the Division of Forestry with the largest single item being \$400,000 in additional funds for the air attack program.

The department's major programs are divided into the following categories for presentation and analysis: land use development and management, fire protection and conservation camps.

ANALYSIS AND RECOMMENDATIONS**Land Use Development and Management**

The objective of the Land Use Development and Management Program is the prudent use of the state's forest, soil and geologic resources. Each of the four operating divisions carries on elements of this program, and these elements will be discussed in a separate analysis for each of the four divisions.

Division of Soil Conservation

The Division of Soil Conservation assists in the organization and operation of soil conservation districts, administers the soil conservation grant-in-aid program, plans small watershed projects and provides some financial assistance to the U.S. Soil Conservation Service in its plant testing program. The division has 48 authorized positions and present expenditures are about \$750,000 annually.

The objective of the operations activities of the division is the formation of soil conservation districts. Nearly 70 percent of the state's 100 million acres are now included in soil conservation districts. Most of the work in the formation of soil conservation districts has been com-

Department of Conservation—Continued

pleted and the activity at the present time is directed toward annexations to and consolidation of existing districts.

There are 12 soil conservationist positions in the division assigned to nine different field locations in the state. These field representatives assist the districts in their applications for grant-in-aid requests to the Soil Conservation Commission, in the preparation of applications for small watershed projects (Public Law 566), attend meetings of the soil conservation districts, assist new district directors in becoming familiar with their duties and encourage landowners to join soil conservation districts.

The state originally began financing this program to get the soil conservation districts organized and in operation. Most of the job has now been done. At the present time there are 164 soil conservation districts in California and the number is not expected to increase to any appreciable extent in the future.

The federal government has a major program to assist soil conservation districts. At the present time there are 503 federal employees in California providing technical assistance in farm planning and engineering services on private lands. There is an office of the U.S. Soil Conservation Service in nearly every county in California. The districts have been organized and should be able to continue their operations and activities without further assistance from the state. *We recommend that 12 soil conservationist positions be deleted for a savings of \$145,416 in salaries and wages.*

The Soil Conservation Service of the U.S. Department of Agriculture operates the Plant Materials Center at Pleasanton in Alameda County. The center evaluates and tests plants and has developed new grasses and ground covers for erosion control and other soil conservation applications. For many years the Division of Soil Conservation has been financing the center on a matching basis because at one time the U.S. Soil Conservation Service had a shortage of funds. The Governor's Budget includes \$32,230 to continue this financial assistance. It is time to return the function to federal financing.

We recommend that the state participation in the financing of the center be terminated and that the operating expenses for the Division of Soil Conservation be reduced by \$32,230 to delete these funds.

In the watershed planning program, the division provides technical assistance through field review, reconnaissance studies and planning work for small watershed applications to finance construction of projects under the Federal Watershed Protection and Flood Prevention Act (PL 566). At the present time this work is done by both the division and by the U.S. Soil Conservation Service. The division has two watershed planning units and the Soil Conservation Service has one planning unit in California. The purpose of the state program is to speed up preparation of plans for these projects and obtain more federal money. The watershed projects are constructed with a combination of federal, state and local funds. At the present time, the state expenditure level for the watershed planning is approximately \$480,000 utilizing about 27 positions.

Department of Conservation—Continued

The workload adjustment in the Governor's Budget includes an additional five positions for the watershed planning program with a request for \$64,259. This request follows the addition of four positions to the program in the 1966-67 budget and 1.5 positions added in the 1964-65 budget.

Due to the shortage of General Fund revenues at this time we are unable to recommend approval of this augmentation with attendant commitments of additional state funds in Item 285 for lands, easements and right-of-way.

We recommend that the small watershed planning augmentation be deleted from the budget of the Division of Soil Conservation for a savings of \$64,259.

Division of Mines and Geology

The elements of the Land Use Development and Management Program carried out by the Division of Mines and Geology include the identification of geologic hazards in urban areas, gathering and disseminating information on the basic geology of the state and research and publication of data about the mineral deposits and resources of California. The division expends approximately \$1,200,000 annually for 72 positions.

Section 2205(h) of the Public Resources Code permits the division to investigate and identify geological hazards in and adjacent to metropolitan areas. At the present time urban mapping projects are in process in the City of San Diego, and Orange, Los Angeles, Ventura, Contra Costa and Marin Counties. The code authorizes these investigations to be done on either a cost-sharing or cooperative funding basis. The budget for the division identifies reimbursements from Los Angeles and San Diego for geological investigations. The work done in other counties is completely funded by the division. The basis for the lack of uniformity in administering the program apparently is that the amount of work performed in other counties is not as great as that done in San Diego and Los Angeles. The division should administer the cost sharing uniformly throughout the state.

In 1966, a procedure was initiated whereby the State Division of Real Estate forwarded to the Division of Mines and Geology requests for staff comment on geological problems at each new real estate subdivision. It is estimated that these reports will be forwarded to the division at the rate of about 1,500 per year. The budget contains no reimbursement for the services provided by the Division of Mines and Geology for the Division of Real Estate. Since the Division of Real Estate is a special fund agency and the application fee for new subdivisions is to include all expenses for state processing, the work performed by the Division of Mines and Geology should be completely reimbursed from the Division of Real Estate.

We recommend that the division review subdivision applications only on a reimbursed basis from the Division of Real Estate and that the appropriation request be reduced accordingly.

The budget includes workload adjustments for an information clerk and librarian position in the San Francisco office. Also, the budget

Department of Conservation—Continued

includes the addition of a draftsman, \$2,500 of temporary help and \$17,500 in printing funds to permit the reprinting of publications in greatest demand and the printing of selected manuscripts unpublished in the past due to lack of funds. The division's budget, before the request for additional printing funds, includes almost \$100,000 for printing expense, about 10 percent of the division's budget.

In view of the shortage of General Fund revenue, we recommend that the division defer its request for the additional printing funds and related draftsman and temporary help for a savings of \$28,094.

The Department of Water Resources has budgeted \$1,030,090 for earthquake and geologic hazards work next fiscal year. As discussed under the analysis of Item 217, the water service contractors have been objecting to charging the long-term, research-oriented phases of this work to the State Water Project. The contractors are proposing General Fund support for the nonproject portions of the work.

We have generally concurred with this view except that it appears more appropriate for the Division of Mines and Geology, which has statutory authorization to engage in geologic work, to perform the work if it is to be financed by the General Fund. The Department of Water Resources has no statutory authority to conduct such work except as part of the State Water Project.

In our analysis of the Department of Water Resources we recommend that the basic, long-term, research-oriented work in earthquake and geologic hazards be shifted to the Division of Mines and Geology and be financed by a reduction in the Division of Forestry grass and brushlands firefighting program. Since it is not yet known what funds may be needed to cover the work transferred from the Department of Water Resources or what funds may be reasonably made available in the firefighting program, we cannot make a specific recommendation. However, if the Legislature provides the necessary directive, we will explore these possibilities further with the two departments involved.

Division of Oil and Gas

The elements of the Land Use Development and Management Program performed by the Division of Oil and Gas include the regulation of oil and gas operations and the publication of maps, statistics and other data relating to oil and gas operations. The division supervises the drilling, operation, maintenance and abandonment of all oil and gas wells to prevent waste and damage to underground oil and gas deposits or contamination of fresh water sources penetrated by oil and gas wells. Chapter 1483, Statutes of 1965, requires the division to regulate the drilling, operation and abandonment of geothermal energy wells. Funds for the support of the Division of Oil and Gas are appropriated in Items 198 and 199.

The Division of Oil and Gas is a special fund agency and is supported by charges on operators of producing oil and gas wells through the Petroleum and Gas Fund and the Subsidence Abatement Fund. The activities of the division are budgeted at about \$1,125,000 and include 81 authorized positions.

Department of Conservation—Continued
Division of Forestry

The Division of Forestry carries on substantial programs in the Land Use Development and Management Program. The division spends approximately \$190,000 annually in detection, control and research on insect and disease infestations. According to the division, the forest losses due to pests exceed fire losses by tenfold. Through the operation of four state nurseries, the division produces about 3.5 million seedling trees for reforestation purposes and conducts reforestation studies and research on methods and accomplishments of reforestation. Estimated costs for the program are about \$145,000. As a result of our recommendation in the analysis of the 1965-66 Budget Bill, the Legislature directed the division to place the nursery operations on a self-supporting basis. The prices for the planting stock were increased. Despite the increase in the prices, we can report to the Legislature that the number of trees distributed increased by 300,000 over the previous year.

The division spends approximately \$200,000 annually for soil vegetation surveys on the wild lands of the state, for emergency revegetation of burned watersheds to protect against floods and soil erosion, for advice and assistance to project sponsors for forestry measures necessary in the small watershed projects under Public Law 566, and for research on cooperation with the U.S. Forest Service on management of brush-covered watersheds in southern California.

The brushland range advisory service advises landowners on methods of converting brush to more desirable forages through the use of controlled burning and other methods of brush treatment. These activities amount to approximately \$140,000 in expenditures annually. The Division of Forestry administers the Forest Practices Act which requires the management of forests and timberlands so as to maintain continuous production of forest products. The division licenses the timber operators and attempts to inspect each timber operator at least twice a year. The costs for administering the Forest Practices Act are estimated at about \$114,000 annually.

It appears that violations of the Forest Practices Act may in practice be encouraged under terms of timber tax exemption in the State Constitution. Section 12 $\frac{1}{2}$, Article 13 of the Constitution states "... all immature forest trees . . . planted or of mature growth, upon lands from which the marketable original growth timber stand to the extent of 70 percent of all trees over 16 inches in diameter has been removed shall be exempt from taxation. . . ." This language of the Constitution appears to be working at cross-purposes with the Forest Practices Act.

A major purpose of the above constitutional provision is to assure good forestry management by providing a 40-year period of tax exemption for timber in order to permit the timber to mature and to discourage premature cutting of timber before it provides an optimum amount of timber per growing tree. The Forest Practices Act has the objective of prescribing the rules and regulations which are intended to specify good forestry management practices. Special emphasis is given to logging practices and land management designed for reten-

Department of Conservation—Continued

tion of small trees or larger seed-bearing trees and reseeded or replanting of trees in order to assure a sustained yield.

Unfortunately, the enforcement of the Forest Practices Act is difficult, among other reasons, because of the complexities of prescribing good practices for the varying soil, climatic and topographic conditions where timber grows. It has, therefore, been difficult for the Division of Forestry to enforce the act and enforcement is largely a matter of education and attempts to persuade either the timber owners or the logging operators to follow good practices.

At present even though timber is logged in violation of the Forest Practices Act, the owner can receive the tax exemption under the Constitution. This literally means that the short-term economic benefits of poor forest management practices can be followed and the landowner can still receive long-term economic benefits in the form of a tax exemption which is actually intended to improve forestry management. This difficulty arises primarily among smaller private landowners who may have no interest other than securing the maximum return from the immediate logging of their land.

Consideration should be given to amending the Forest Practices Act to require that the State Forester certify that all provisions of the Forest Practices Act have been observed by the owner and the logging operator before the constitutional tax exemption is granted. Such an approach would be a positive economic inducement in the direction of good forest practices which, in the long run, is the objective of the constitutional provision and the Forest Practices Act.

A somewhat related problem arises whenever a landowner applies to the Division of Forestry for a conversion affidavit. By means of this affidavit, the landowner swears that he is logging certain described lands with the intention of converting that land to other purposes such as grazing or farming. In practice, unknown but presumably significant quantities of timber are cut under conversion affidavits without any intention of converting the land to other purposes. This is advantageous to the landowner in the short run because, having filed the conversion affidavit, he is exempt from the provisions of the Forest Practices Act which requires restocking, reseeded or other forms of reforestation. It is, of course, difficult to prove the intentions of the landowner at the time he files the conversion affidavit and frequently it is virtually impossible to determine whether he has actually logged the land for grazing purposes or to avoid the requirements of the Forest Practices Act. In any event, no land logged under a conversion affidavit should ever be eligible for the timber tax exemption under the Constitution, and to this end the county assessors should be notified by the Division of Forestry when a conversion affidavit is filed.

It is recommended that the Legislature instruct the Division of Forestry to notify the county assessor when a conversion affidavit is filed and that the problems of reconciling the Forest Practices Act and the timber tax exemption be studied by the Legislature.

The Division of Forestry provides forestry advisory services to about 1,800 owners of forest lands annually. This program provides such

Department of Conservation—Continued

technical services as outlining a plan for forest management, sample marking and measurement of trees and forest products, timber sale practices and marketing, and assistance in seeding, planting and thinning. The cost for this service is estimated at approximately \$250,000 annually.

The Division of Forestry operates eight state forests totaling 70,238 acres. The four largest forests are actively managed as demonstration forests. The objective of the operations is to demonstrate the feasibility of making forest lands fully productive through economical management and also provide for scenic, wildlife and recreational values. The staff at the state forests conduct timber sales and carry on experiments in reforestation, stand improvement, harvesting methods and watershed protection. The costs to manage the state forests are estimated at about \$190,000 annually, including in-lieu taxes. The budget indicates revenue to the General Fund from the sale of forest products in 1965-66 was \$857,373.

For approximately 10 years the Department of Water Resources has been financing the state's portion of a cooperative research program involving the University of California and the U.S. Forest Service. This program is seeking to discover methods for increasing water yield by management of timber lands, grasslands and brushlands.

The primary interest of the Department of Water Resources lies in the increased yield of the watershed downstream where projects to conserve and transport the yield may be located. The department is also interested in the adverse effects of sedimentation on downstream reservoirs and in the prevention of rapid runoff and flooding.

The Department of Conservation is interested in the management of the watershed and the grass and brushlands themselves rather than in the downstream effects. While both agencies have interests in the work the more direct interest lies in the Department of Conservation because of its direct interest in the watersheds themselves and because of certain regulatory powers it has affecting these watersheds.

The Watershed Management Program needs to be evaluated in terms of its accomplishments leading towards better watershed management. It is recommended that the program be transferred to the Department of Conservation. As an appropriate responsibility for that department, it should be evaluated by that department against its other research work and related activities. If the Department of Conservation finds this program to have value and to be worthy of continuation, it should be absorbed in Conservation's budget.

Fire Protection Program

Section 4125 of the Public Resources Code requires the State Board of Forestry to classify all lands within the state for the purpose of determining those areas in which preventing and suppressing fires is primarily the responsibility of the state. The code requires those lands covered wholly or in part by timber, brush, undergrowth or grass, which protect the soil from excessive erosion, to be included as well as those lands which are used principally for range or for forage purposes.

Department of Conservation—Continued

There are approximately 100 million acres in the State of California and the board has classified approximately 38 million acres as state-responsibility lands. The division directly protects from fire about 28 million acres and under contract pays for the protection of about 5 million acres by the U.S. Forest Service and about 4 million acres by the five counties of Los Angeles, Santa Barbara, Ventura, Kern, and Marin. The division spends approximately \$30 million in carrying out this responsibility.

In addition, the division protects approximately 6 million acres of local responsibility or agricultural land in 26 counties which have a rural fire protection agreement with the Division of Forestry at a cost of approximately \$7,500,000 annually in local funds.

The three elements of the fire protection program include fire prevention, fire control of state responsibility lands, and rural fire protection.

Fire Prevention

The fire-prevention activities on state responsibility lands are estimated to have cost about \$840,000 in 1965-66. These activities include education to inform the public of dangers caused by uncontrolled fire and dissemination of information on state fire-prevention laws. Fire law enforcement activities include investigating the cause of each fire, prosecution of violators of state fire laws and efforts to recover public funds spent to suppress fires. The Governor's Budget indicates that in 1965-66, \$155,748 in revenues to the General Fund were received from fire cost reimbursements. Fire prevention also includes conducting inspections to reduce or abate fire hazards including the reductions of fuel accumulations along public roads, utility and railroad rights-of-way and on private property. About one-half of the fire prevention effort is directed toward reduction or abatement of hazards. The division also participates in a fire prevention research program in cooperation with the Pacific Southwest Forest and Range Experiment Station.

Until recent years, the Division of Forestry gave little attention to fire prevention. In 1963 the Legislature enacted a comprehensive fire prevention statute, Chapter 2038, and the division developed an administrative nucleus for increased fire prevention activity. In 1964 the headquarters staff put considerable effort into the analysis of existing data and developed workload requirements for a full-scale fire prevention program and a plan for its partial implementation. According to the data developed by the headquarters staff, approximately 10 percent of the contemplated workload in fire prevention effort was being accomplished at that time with existing personnel. The plan for a full-scale fire prevention program would have required an initial appropriation of about \$8.75 million for personnel and equipment and subsequent annual expenditures of \$6.5 million.

In 1966 the division included in its budget a partial implementation of the fire prevention program and secured funds for annual expenditures of approximately \$712,000. This implementation financed 47 new positions to be filled at various times during the fiscal year 1966-67. In-

Department of Conservation—Continued

cluded were additional headquarters, district and field positions together with the establishment of a pilot project at the Butte Ranger Unit. The staffing at the Butte Ranger Unit was on a level commensurate with full implementation of the \$8.75 million fire prevention program and was to provide an opportunity to evaluate the effectiveness of the full program.

The Governor's Budget for next year abolishes 30 of the positions authorized one year ago for the fire prevention program. The budget leaves only the 16 positions for a pilot study in Butte County. This reduction (\$239,962 in salaries and wages) is in line with our recommendation to the Legislature last year when the fire prevention program was presented. We said then that if the Legislature is to establish a firm and carefully formulated program for fire prevention, the program must be initiated with greater knowledge of the anticipated effectiveness on a statewide basis than presently exists. The costs of a statewide program are sufficiently large that an objective and factual verification of accomplishments should be made before the program is extended.

The fire prevention program approved last year included the establishment of about 20 fire prevention officers at various locations in the state. The experience to date in the Butte County pilot project would indicate that the scattering of inspectors may not be effective. The division reported to the Board of Forestry on November 30, 1966 that "... a task force giving intensive treatment to a target area, then moving on to another area, is more efficient than individual inspectors working alone and scattering their efforts over broad areas."

Fire Control on State Responsibility Lands

The Division of Forestry's fire control program is estimated to cost in excess of \$28 million annually. The objective is to detect and control all fires as quickly as possible. It is intended that control shall be achieved in most cases with initial attack forces. The fire control organization has an ability to mobilize rapidly because of its considerable depth in staffing and geographic dispersion.

The state is divided into six field districts and 31 ranger units. Located in these ranger units are about 232 forest fire stations and 80 lookouts. These facilities require an extensive communication system. The Division of Forestry contracts for the use of light aircraft for observation purposes and air tankers for the dropping of fire retardants. In addition to its permanent fire control employees, the division hires about 1,900 seasonal employees, most of them firefighters for initial ground attack. About 3,000 conservation camp inmates provide a reservoir of manpower for campaign fires.

Although the Division of Forestry does not include the use of, nor allocate any costs of conservation camp inmates and wards in the fire control program, the effort of the inmates is an important fire control factor. In addition to firefighting these conservation camp crews provide the maintenance and service of much of the Division of Forestry's suppression and presuppression facilities, such as maintenance of fire roads, bridges, telephone lines and lookout stations. Corollary to the

Department of Conservation—Continued

fire control program is the inspection, maintenance and repair of the division's property and equipment.

To prevent duplication, the protection of 5.2 million acres of state responsibility land within or adjacent to the national forests is contracted to the United States Forest Service for which the state pays the federal government about \$1,370,000. Also, the Counties of Marin, Kern, Ventura, Santa Barbara and Los Angeles have elected to protect state-responsibility lands within their counties. In the budget year the state will pay these five counties approximately \$2,371,000 to provide such protection. These two appropriations are discussed further in items 200 and 201.

Air Attack

The division contracts with air tanker operators to assure the availability of tankers at specific locations and to pay for their flight time on fires. The division has support funds appropriated specifically for the rental of aircraft and \$200,000 in budgeted emergency funds for various uses. Almost every year the division also goes to the Governor's Emergency Fund to finance the air attack program.

The Governor's Budget includes a workload increase of \$400,000 for the rental of aircraft in the air attack program. This is in addition to the \$513,553 already budgeted for this purpose and provides an increase of about 80 percent in support funding for the air attack program.

Until the past fire season, the contracts for air attack operations were made through the competitive bidding process. The division's contracts have specified a minimum guarantee for the availability of an aircraft and then have provided for flight time credited against the minimum guarantee. Now this procedure has been changed.

Beginning in 1964 and continuing through 1965 the United States Forest Service carried on a series of discussions with the National Air Tanker Operators' Association and the State Division of Forestry involving contracting procedures and costs of providing air attack services. The air attack operators presented to the division and the U.S. Forest Service an analysis of their operational costs in support of their needs for increased contractual guarantees.

In February 1966 the Forest Service decided to establish specified minimum guarantees for availability only of air tankers based on air tanker types and length of contract period which would return to the operator the major portion of his fixed costs of preparing the aircraft for flight and other fixed annual charges but excluding any ordered flight time. This was a major change from the previous system in which contracts for air attack services were awarded on the basis of competitive bidding to establish a flight hour rate with all flying applied against established minimum guarantees at the bid rate.

The Division of Forestry in 1966 adopted the new Forest Service system. The division awarded its 1966 air contracts on the basis of the forest service established rate for availability of specified types of aircraft with competitive bidding for the costs of flight time. The division had to obtain additional funds to finance flight time previously purchased with the minimum guarantee. The division also made some pro-

Department of Conservation—Continued

gram changes which included a 25 percent increase in the length of the period of the contract or standby in District I and lesser increases in the length of the contract season in Districts II and IV. An aircraft was substituted in District I where a helicopter had been assigned previously. In addition, there was included an unidentified increase in the level of service. Under the former level of funding for the initial air attack program as approved by the Legislature, the activities were financed at approximately 77 percent of the ideal planned air attack needs of the state, according to the Division of Forestry. The program as budgeted for next fiscal year and as augmented in the current year from the emergency fund includes financing of the initial air attack operations at approximately 100 percent of the ideal planned needs of the state.

The Department of Finance approved funding the initial air attack program with \$400,000 from the Emergency Fund with the understanding that the necessary budget request would be included in the 1967-68 fiscal year budget. Even though the Legislature was in session, it was not consulted in this matter.

As the table below indicates, the air attack program has grown rapidly within the past four years.

Air Attack, Expenditures for Direct Operating Expense

	1963-64	1964-65	1965-66	1966-67 *
Observation -----	\$63,050	\$121,745	\$92,704	\$79,866
Tanker -----	279,847	705,804	689,793	858,616
Helicopter -----	73,510	141,733	186,425	124,161
Retardants -----	97,597	326,954	351,702	425,496
Totals -----	\$514,004	\$1,296,236	\$1,320,624	\$1,488,139
Support -----	\$217,381	\$457,701	\$472,539	\$513,553
Emergency Fund -----	296,623	838,535	848,085	974,586
Totals -----	\$514,004	\$1,296,236	\$1,320,624	\$1,488,139

* Estimated and includes Emergency Fund allocations as of December 31, 1966.

The table shows that the support budget for the Division of Forestry has generally financed about one-third of the actual expenditures for air attack each year. The program as budgeted for the next year includes the \$400,000 increase and would require about \$900,000 in support funds for the rental of tanker aircraft. The costs of retardants would be extra. The costs of flight time on emergency fire situations for campaign fires and those beyond the initial attack stage would still require additional funding from the Emergency Fund.

Under present arrangements it is difficult, if not impossible, for the Legislature to control expenditures for aircraft rental. If the aircraft is available, a ranger would be reluctant to fly the aircraft only 77 percent of the planned need for the use of the aircraft when the Emergency Fund will pay the cost. The Legislature may wish to limit the use of the Emergency Fund by the Division of Forestry for air attack to a certain base level.

We bring this matter to the attention of the Legislature for the following reasons. First, a major change away from the competitive

Department of Conservation—Continued

bidding was made in the program. Second, the allocation from the Emergency Fund provided an increase in the level of service of approximately 25 percent. Third, the Legislature was not advised of this change, even though it was in session.

We recommend that the Division of Forestry explain its actions on this program to the Legislature including the necessity for a revision in the method of contracting and the expenditure of emergency funds to raise the level of service of the air attack program. Meanwhile, we recommend deletion of \$400,000 for the air attack program.

Forest Fire Stations

The Division of Forestry has approximately 232 forest fire stations located throughout California to protect state responsibility lands. Most of the stations are manned six to eight months of the year during the fire season. Some of the stations are also manned during the winter time to provide local fire responsibility protection services under contract to counties or fire districts.

Until recent years the forest fire stations were the entire fire control organization of the Division of Forestry. They are still the nucleus of the fire control organization but the effectiveness of fire control has been increased and expanded enormously through development of the California Conservation Camp program and the use of inmates and the expansion of the air attack program. The conservation camp program has provided a reservoir of manpower for campaign fire purposes. The air attack program has been extremely helpful, according to the division, in initial attack by stopping the spread of fires until the ground forces arrive to surround and suppress it. Of the total number of fires on which air tankers have taken action, the air tankers have arrived at approximately 25 percent of the fires ahead of the ground units. The division credits air attack with helping to reduce the percentage of large fires.

In addition to the approximately \$5,300,000 that the Division of Forestry spends for year-around fire control field services, the division also hires summer or seasonal fire suppression personnel at a cost of approximately \$8 million, to provide full manning of the forest fire stations and trucks in the 232 forest fire stations during the fire season. The division is sensitive and reacts strongly to any suggestions that some revisions or changes in the number of forest fire stations or the deployment of crews at the stations may be in order. However, the division does not have minimum standards to judge the continued existence or the accomplishments of its forest fire stations.

Each year the division publishes statistics on the division's fire control operations. These statistics include acres burned and amount of losses, and show for each forest fire station the number of crew runs and the number of times the crews from the station were the first to arrive at the fire. The number of crew runs and the man-hours expended on those crew runs gives some indication of the level of activity and accomplishment of the forest fire station during the six to eight months of the fire season. The number of times the crews from a station

Department of Conservation—Continued

arrive as first attack on a forest fire also gives some indication of the need for the fire station at the present location. The above data is available on the activities of all 232 stations.

We have studied the reports for the past three years and show on the table which follows data on 28 state-financed stations where there were fewer than 20 crew runs in each of the years 1963, 1964 and 1965. Also listed are the number of times the crews from each station were the first to arrive at the fire and the total man-hours that the station expended on these crew runs during the course of the fire season. The number of crew runs includes runs for forest fires on state lands, U.S. Forest Service fires, local responsibility fires and false alarms, if any.

Forest Fire Stations with 20 Crew Runs or Less in 1963, 1964, and 1965

Forestfire station and classification	1963			1964			1965		
	Crew runs	First attack	Man hours	Crew runs	First attack	Man hours	Crew runs	First attack	Man hours
Mendocino									
Rockport (2) ----	12	2	321	17	4	977	12	1	741
Butte									
Transfer Point (3)	5	1	295	10	1	543	13	1	359
Lassen									
Grasshopper (1)	14	0	334	15	3	981	10	4	277
Willow Creek (2)	16	5	222	15	1	872	11	5	167
Shasta									
French Gulch (2)	3	1	65	14	2	1,584 *	6	1	108
Latour (2) -----	9	2	696	9	0	545	5	0	207
Amador									
Dew Drop (2) ----	12	0	178	11	1	443	18	3	329
Calaveras									
Bailey Ridge (1)	2	0	17	10	1	294	9	1	232
Skull Creek (1) --	7	0	102	6	0	41	19	5	229
Nevada									
Columbia Hill (2)	9	1	292	11	2	430	15	2	357
Fresno									
Sand Creek (1)---	9	0	441	7	0	308	12	1	277
Sanger (1) -----	11	0	239	18	1	840 †	17	0	544
Mariposa									
White Rock (2)---	5	1	244	13	1	497	14	0	166
Merced									
Gustine (3) -----	18	0	298	13	2	480	14	0	309
Tulare									
Badger (3) -----	11	0	372	8	1	103	11	0	558
Hammond (2) ----	11	0	329	4	1	52	12	0	305
Milo (1) -----	11	0	342	7	2	425	13	1	275
Tyler Creek (1) --	5	0	50	2	0	290	5	1	57
Monterey									
Mustang (1) ----	11	0	113	15	1	740	11	0	605
Parkfield (2) ----	9	0	386	11	3	435	10	1	93
San Benito									
Antelope (2) -----	15	2	316	15	0	234	20	2	666
San Luis Obispo									
Cambria (2) -----	8	2	208	15	3	253	8	1	61
La Panza (3) -----	17	2	490	12	0	174	11	1	165
Las Tablas (3)---	7	0	124	19	0	273	19	4	5,934

Department of Conservation—Continued

Forest Fire Stations with 20 Crew Runs or Less in
1963, 1964, and 1965—Continued

Forestfire station and classification	1963			1964			1965		
	Crew runs	First attack	Man hours	Crew runs	First attack	Man hours	Crew runs	First attack	Man hours
Santa Cruz									
Sandy Point (2)---	6	0	2	11	1	372	5	0	227
Orange									
Trabuco (1) -----	13	2	211	15	0	97	12	2	76
Riverside									
Sage (1) -----	5	0	12	7	0	127	11	0	149
San Diego									
De Luz (1) -----	8	1	80	12	1	278	9	1	315

* Three crew runs and 1,018 man hours in another county.

† Four crew runs and 445 man hours in another county.

The table below indicates the number of forest fires that Forestry responded to and the first attacks by these 28 stations in each of the three years.

	1963	1964	1965
Number of forest fires-----	2,545	3,665	3,265
First attack by 28 Stations-----	22	32	38

The crews from these 28 stations provided about 1 percent of the first attacks on forest fires in California in each of the three years.

The 28 stations include stations classified as number 1, number 2 and number 3. In general, a number 1 station has five men assigned to it for fire control purposes and one truck. A number 2 station has nine men assigned and one truck. A number 3 station has 10 men assigned and two trucks in most cases. The estimated cost of operating each class of station each fiscal year is as follows:

No. 1. Station-----	\$36,830
No. 2 Station-----	50,925
No. 3 Station-----	58,080

These figures do not include the cost of equipment which is substantial. The annual operating costs for the 28 stations listed above is \$1,306,630. It can be seen that for \$1,306,630 the State of California was provided with the first attack on 1 percent of the forest fires on state responsibility lands.

The above data indicate a serious need to evaluate the continuation of these stations. It is evident that they are incurring a high cost for the service provided. In order to bring this problem before the Legislature for policy consideration and to secure an evaluation of the need to continue these stations from the Division of Forestry, we recommend that \$1,306,630 plus an appropriate equipment adjustment be removed from the budget.

General Fund Financing

The General Fund finances the fire control and fire prevention efforts of the Division of Forestry on the 38 million acres of state responsibility

Department of Conservation—Continued

lands as discussed above. The vegetative cover on these lands is as follows:

Timber -----	8,310,000 acres
Brushland -----	8,150,000 acres
Woodlands -----	6,160,000 acres
Woodland grass and grasslands ----	15,380,000 acres
	<hr/>
	38,000,000 acres

The basis for General Fund financing is Section 4006.5 of the Public Resources Code which states, "It is in the public interest and to the benefit of the state that forest and vegetative cover be maintained and preserved on forest and watershed lands to conserve water and soil and to prevent destructive floods." The state responsibility is for the natural vegetative cover and does not legally include structures or other improvements on the land.

As a practical matter the private landowner enjoys the benefits of the wildland firefighting services at no cost to himself on the basis of the state's interest in protecting adjacent watershed lands from floods and erosion. Furthermore, the Division of Forestry also responds to structural fires in its responsibility areas because of the danger that these fires might spread into the wildland and become forest fires and also because of the possibility of loss of life and economic values. As a result, the beneficiaries of these services realize a degree of local fire protection at no cost other than through their participation as general taxpayers of the state.

In 1965 there were 3,256 forest fires on the Division of Forestry's state responsibility lands and 2,346 nonforest fires. Nonforest fires consist of structural, improvement, vehicular and refuse fires. The forest fires caused \$282,624 in timber resources damage and \$4,189,314 in damage to improvements on these lands. The nonforest fires did \$5,398,876 in nonforest damage. These figures indicate that much more fire damage is done to the improvements on the wildlands and nonforest values than to the wildlands and forests themselves.

Complete General Fund financing of the fire prevention and fire control program indicates that the general public, those who contribute to the General Fund, has a public interest and responsibility on these private lands which is at least as great as the landowners themselves. The above data indicates that this is not the case. There are no significant financial responsibilities to being a landowner as far as fire control purposes go. At the very least, the Division of Forestry provides about \$30 million annually in firefighting benefits to the private landowners on the state responsibility land areas at no direct cost to these beneficiaries. In addition, the Division of Forestry is also constructing fire-breaks, access roads and other betterments with General Fund money on private property.

We recommend that the Legislature review the policy problem involved in these free services and provide an equitable basis to defray some of the state's costs for fire prevention and suppression purposes.

Department of Conservation—Continued
Rural Fire Protection

In 26 of the counties where the Division of Forestry furnishes fire control services for state responsibility areas, the boards of supervisors or district fire commissioners contract with the State Forester to have the Division of Forestry provide some degree of agricultural or rural fire protection. The local agencies reimburse the division for this service. The budget indicates that 593 state employees will be engaged in providing this local fire protection service and the Division of Forestry will be reimbursed in the budget year \$5,147,498 for the service which includes \$166,361 as a 3 percent administrative overhead charge to the local agencies.

In addition to the reimbursements that will be expended for this service, the local rangers will also direct the spending of about \$2,700,000 in local funds for supplies, equipment and salaries to provide this local fire suppression service. The total program, including expenditures from all funds has been growing at a rate of almost 10 percent annually and will amount to approximately \$7,800,000 in the current year. The local fire protection services program has been growing at a faster rate than the state responsibility fire protection program.

This program provides area continuity of fire suppression services rather than have strict lines of demarcation and resulting problems of jurisdiction between the state and local responsibility areas. In most counties these arrangements are mutually advantageous. The contracts provide winter employment for Division of Forestry personnel who otherwise would be seasonal. The joint financing is a good solution to the problem of providing fire suppression in the remote areas of the state along the boundaries of what is state responsibility land and local responsibility land and where state and local responsibility lands are intermingled. The arrangement also adds depth to the field organization of the Division of Forestry and allows the division more flexibility in moving personnel statewide to any serious fire danger area.

The program began over 30 years ago when most rural areas of the state were sparsely populated. In 1934-35, the division expended \$123,307 statewide for the local fire protection service. In 1966-67, the expenditures are estimated at \$7,817,764.

Some areas of the state where the division provides this service, have developed enough now to provide their own fire protection service and do not present the problem of intermingled state and local responsibility lands. The local responsibility, unincorporated areas in Fresno County have reached this condition. They have formed two fire districts to contract with the state Division of Forestry for their local fire protection service. There are approximately 113 state employees providing fire services for the districts on an annual budget of about \$1,500,000. The land area is about 1,700,000 acres. The fire districts could hire their own crews to provide the fire suppression services and the Division of Forestry could withdraw with no harm to the local citizens nor to the state. The local citizens would be performing their proper local function in providing their own fire protection.

We originally brought this program to the attention of the Legislature three years ago when we recommended and the Legislature con-

Department of Conservation—Continued

curred that the division should review its charge for administrative overhead to the counties and districts to reflect a higher and more realistic charge than the 3-percent rate which has been traditionally used. We made this recommendation because the 3-percent rate appears to contain an element of subsidy. In the three years since that time, the Department of Conservation and the Division of Forestry have not completed their study. Their approach has been to hold a series of meetings with members of the boards of supervisors, county administrators and local division of forestry rangers in six counties. The department issued a preliminary report in March of 1965 but has not presented a data report to show the actual administrative costs to the Division of Forestry for the program.

There are future cost implications to the state in continuing to provide local services where this service is becoming similar to a municipal-type fire department. The Division of Forestry is basically a wildland fire control organization. Its organization is based on a seasonal fire control problem with the weather the dominant factor in fire starts. In the wildland fire control organization there is less need for year-round positions and consequently the duty week during the fire season may be longer than for a municipal fire department.

In the case of a metropolitan or municipal department, there is a year-round fire danger because of the structures involved. Consequently, the trend is toward a shorter duty week in the municipal departments than in the wild land fire control organization. When the Division of Forestry applies its wild land fire control standards and length of duty week in a municipal fire department situation, the Division of Forestry is not providing working conditions on a comparable level with other local fire control organizations. Since the Division of Forestry wishes to keep all its employees on a common duty week, there is pressure to reduce the duty week for all personnel to the duty week for local fire protection services. These pressures include reducing the duty week of employees who perform seasonal fire suppression work on wildlands and if this should occur the state's costs for wildland fire protection would increase greatly.

We recommend that the Division of Forestry withdraw from performing local responsibilities in Fresno County and that the local protection services provided by the division in Fresno be terminated effective December 31, 1967.

Conservation Camp Program

The Conservation Camp Program has a dual objective of rehabilitation and training for the inmates of the Department of Corrections and the wards of the Youth Authority along with performing important conservation work and providing an emergency capability for the Division of Forestry. At the present time there are 38 conservation camps with an inmate population of about 3,000. The typical camp houses 80 inmates and provides kitchen and warehousing facilities. A staff of 11 forestry personnel and 6 Department of Corrections or Department of Youth Authority personnel supervise the work and rehabilitation.

Department of Conservation—Continued

One crew of inmates does the housekeeping and meal preparation; four crews, on the average, work on conservation projects. These four crews also constitute the "backup" fire crews. One crew of inmates provides maintenance and camp service. The program has estimated costs of about \$7,500,000 in the current year. The 1966-67 budget contained funding for the staffing of 21 positions for the Bautista and Ortega Conservation Camps in southern California. The establishment of these camps has been deferred and the Governor's Budget reduces 21 positions for these two conservation camps.

The Governor's Budget also includes \$33,566 for two additional civil engineers in district headquarters to plan and design work projects for conservation camp inmates. Since the budget has deferred the staffing for two previously authorized conservation camps and engineers were provided for those camps, there is no need for additional civil engineers.

We recommend that \$33,566 for the funding of the two civil engineer positions be deleted.

The budget includes \$94,329 for incentive pay to the inmates. The Division of Forestry has budgeted pay incentives and general pay increases for conservation camp inmates. The Department of Corrections experience with the incentive pay plan has not been satisfactory. *On this basis and also due to the severe shortage of General Fund revenues in the budget year, we recommend the funds in the amount of \$94,329 for the incentive pay plan be deleted.*

The Legislature at the 1963 General Session created the Youth Conservation and Training Program. The program was authorized by Chapter 12, Division 4 of the Public Resources Code and was established as a pilot project with a two-year limitation. The program was a pioneer effort in the nation to train boys lacking basic employment skills and provide them with some work experience in forestry and natural resource activities. The Oak Glen Conservation Camp in Riverside County was converted to serve the youths in the new program. The first youths arrived at the camp in November 1963 and the camp continued in operation under state auspices and funding until June 1, 1965. The operation at Oak Glen was watched carefully by the federal government which was just starting the antipoverty program.

Funds to operate the camp under state auspices for the 1965-66 fiscal year were not requested of the Legislature and the state entered into an agreement with the federal government to operate the camp as a job corps conservation center. Since June 1, 1965, the camp has been operated by the state and financed by the federal government under the Economic Opportunity Act. The federal government operates seven other job corps conservation camps in the State of California. This is the only state-operated job corps conservation camp. The Governor's Budget includes a reimbursement to the State of California from the federal government of \$975,019 to operate the camp during the budget year.

The budget proposes the addition of 30 positions next year to operate the camp under terms of a revised contract which increases the size of the camp from a 100- to a 170-boy facility. The increased size of the

Department of Conservation—Continued

camp will no longer be compatible with the state's conservation camp program. A total of 54.6 positions of the enlarged camp would be reimbursed by the federal government for operating the Oak Glen Camp. Some of the new positions are classifications foreign to the established work and responsibilities of the Division of Forestry. These new positions include a vocational testing and counseling supervisor, a supervisor of academic instruction, an employment counselor, an instructor in industrial arts, four high school teachers and one elementary teacher. Under federal auspices, the programs at Oak Glen have changed from forestry orientation under the state program to more emphasis on formal education with the Division of Forestry assuming an educational function. This is a federal program and state efforts to operate and administer a fragmented program, as is the case at Oak Glen, are not needed, especially when this leads forestry into activities which are not its responsibility.

We recommend the Division of Forestry terminate the contract with the federal government for the Oak Glen operation effective June 30, 1967, and return the operations of the Oak Glen Camp to the Conservation Camp Program. This action will require the state to pick up the tab for the annual operations of the camp, approximately \$300,000, but will save in the expenses of capital outlay for construction of another conservation camp in southern California and permit the camp population to assist the Division of Forestry in fire control and forestry work programs. If, in the alternative, the state determines not to use the Oak Glen Camp as a conservation camp, it is recommended that the facility be sold to the federal government to recover the state's investment.

Civil Defense and Nonfire Emergencies Program

The Division of Forestry maintains a preparedness and capability to respond to war-caused and natural disasters under the Governor's executive orders and such agreements as those with the Department of Water Resources for flood fighting. In the December and January floods of 1965-66, the Division of Forestry and the inmates from the conservation camps were helpful in combatting floods. No funds are identified or proposed for this program.

Land and Water Conservation Fund Program

The Land and Water Conservation Fund Act is a federal program to provide financial assistance to states and local agencies for planning, acquisition and development of outdoor recreational facilities. The fiscal services for the program have been delegated to the Department of Conservation by the former Administrator of the Resources Agency. Practically all other elements of the program have been delegated to the Department of Parks and Recreation.

The assignment of these fiscal services to the Department of Conservation creates administrative delays in the state's administration of the program. These fiscal services should be administratively transferred to the Department of Parks and Recreation to secure more efficient operations. The budget indicates that the federal government

Department of Conservation—Continued

will reimburse the state \$13,398 in the current year and \$22,589 in the budget year for the services.

Administration Program

The objectives of the Administration Program are to direct and support the Department of Conservation's programs and to review the performance of those programs. The objectives are accomplished by the staff to the director and the administrative staffs of the Divisions of Mines and Geology, Soil Conservation, Forestry and Oil and Gas. The program costs are estimated at \$3,500,000 in the current year.

During the current year the department has begun program time reporting in the Division of Mines and Geology and the Division of Oil and Gas. This will be a useful tool in program budgeting. The budget includes \$20,000 for data processing services to handle the program time reporting data. A management reporting system study is scheduled to be undertaken in the current year. The results of this study will be useful to management in evaluating program achievements.

Both the Department of Conservation and the Division of Forestry have extensive administrative staffs. We have been concerned with the size of these staffs and the possibilities of duplication of work and inefficiencies between them. The organizational and procedural studies we have reviewed do not clearly define responsibilities or indicate that maximum efficiency exists. We believe that more can be accomplished and savings made in the administrative work.

Department of Conservation
DIVISION OF OIL AND GAS

ITEM 198 of the Budget Bill

Budget page 665

FOR SUPPORT OF DIVISION OF OIL AND GAS
FROM THE PETROLEUM AND GAS FUND

Amount requested in Budget Bill	\$1,049,305
Estimated to be expended in 1966-67 fiscal year	1,035,695
Increase (1.2 percent)	\$13,610

TOTAL RECOMMENDED REDUCTION None

ANALYSIS AND RECOMMENDATIONS

The description of the programs performed by the Division of Oil and Gas is included in the discussion of the prior item under the support for the Department of Conservation. This item is for the support of the Division of Oil and Gas from the Petroleum and Gas Fund with services to be provided at the same level as the current year.

The Department of Finance may introduce amendments to the budget for the division allowing some workload increase less a 10 percent reduction in the total amount of the support budget. The analysis for the Division of Oil and Gas covers only the printed Governor's Budget and does not consider possible unknown future revisions to it.

The Governor's Budget indicates a General Fund workload adjustment for the whole Department of Conservation which includes an ad-

Department of Conservation—Continued

ditional associate engineer position in headquarters of the Division of Oil and Gas together with some price and operating expense increases totaling \$20,097. Since the division is supported entirely by special funds, the workload adjustment amounts for the Division of Oil and Gas included in the General Fund workload adjustment would have to be transferred to the special funds to be effective.

Statutes of 1965, Chapter 1483, placed in the Division of Oil and Gas the responsibility for regulating the drilling and abandonment of geothermal energy wells. According to the division, five proposals have been received to drill or rework wells. Section 3724(d) of the Public Resources Code requires a fee to be filed with the division for the drilling of new wells. At the present time that fee is \$500. The division has received \$2,500 to date and has deposited these funds as required by law in the Petroleum and Gas Fund in a special reserve for geothermal energy. There are some technical problems involved in being able use these funds, according to the controller, without a special appropriation. These difficulties will have to be resolved, for the personal services involved in making the well inspections is being financed by the oil and gas operators.

We recommend approval of the item for the support of the Division of Oil and Gas as budgeted.

Department of Conservation

DIVISION OF OIL AND GAS

ITEM 199 of the Budget Bill

Budget page 666

FOR SUPPORT OF SUBSIDENCE ABATEMENT OPERATIONS
FROM THE SUBSIDENCE ABATEMENT FUND

Amount requested in Budget Bill	\$112,589
Estimated to be expended in 1966-67 fiscal year	109,853

Increase (2.5 percent)	\$2,736
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TOTAL RECOMMENDED REDUCTION	None
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ANALYSIS AND RECOMMENDATIONS

This program for subsidence abatement is described in the analysis of Item 197 for support of the Department of Conservation. The program is supported by an annual assessment on oil and gas producers, and is aimed at arresting the subsidence of land above and adjacent to oil and gas wells. The work is centered in the Wilmington subsidence area.

We recommend approval.

Department of Conservation

DIVISION OF FORESTRY

ITEM 200 of the Budget Bill

Budget page 668

FOR SUPPORT OF WATERSHED PROTECTION BY
COOPERATING COUNTIES FROM THE GENERAL FUND

Amount requested in Budget Bill	\$2,194,722
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Budget request before identified adjustments	\$2,371,297
Increase to recognize full workload change	67,283

Budget as adjusted for workload change	\$2,438,580
Adjustment—undetailed reduction (10 percent)	243,858

Department of Conservation—Continued

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET____ None

BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING \$243,858

ANALYSIS AND RECOMMENDATIONS

Section 4050 of the Public Resources Code provides that the board of supervisors of any county shall have the power to assume the responsibility for fire prevention and suppression on state responsibility lands. Marin, Kern, Santa Barbara, Ventura and Los Angeles Counties have assumed this responsibility. The state has entered into a contractual agreement with these five counties and reimburses them for the assumption of what is a basic state responsibility.

The allocations as presented in the Governor's Budget before adjustments for workload and any undetailed reductions of 10 percent are as follows:

Kern	\$593,691
Los Angeles	919,997
Marin	192,713
Santa Barbara	324,327
Ventura	340,569
Total	\$2,371,297

The amounts to be allocated to each county will have to be computed after final budget revisions are made, and we are unable to make a recommendation on the amount at this time.

**Department of Conservation
DIVISION OF FORESTRY**

ITEM 201 of the Budget Bill

Budget page 668

**FOR SUPPORT OF PRIVATE LAND PROTECTION BY UNITED
STATES FOREST SERVICE FROM THE GENERAL FUND**

Amount requested in Budget Bill \$1,368,866

Budget request before identified adjustments \$1,429,613

Increase to recognize full workload change 91,349

Budget as adjusted for workload change..... \$1,520,962

Adjustment—undetailed reduction (10 percent) 152,096

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET____ None

BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING \$152,096

ANALYSIS AND RECOMMENDATIONS

There are about 5,200,000 acres of state responsibility lands within the national forests of California. To prevent duplication, the Division of Forestry contracts with the United States Forest Service to provide fire protection services for the state lands within the national forests. The Division of Forestry provides fire protection services for some areas of the national forests.

This item is for the net cost of protection of state lands by the Forest Service, after being offset by the cost of forest land protected by the state.

Department of Conservation—Continued

The actual amount to be provided the Forest Service will depend on revisions in the budget for the Division of Forestry. We are unable to make a recommendation on the amount of this item as of this time.

Department of Conservation

MISCELLANEOUS COOPERATIVE AND RESEARCH PROGRAMS

ITEMS 202 through 207 of the Budget Bill

Budget page 668

FOR SUPPORT OF MISCELLANEOUS COOPERATIVE AND RESEARCH PROGRAMS FROM THE GENERAL FUND

Amount requested in Budget Bill		\$418,389
Budget request before identified adjustments	\$452,037	
Increase to recognize full workload change	12,840	
Budget as adjusted for workload change	\$464,877	
Adjustment—undetailed reduction (10 percent)	46,488	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET----- \$28,235

Summary of Recommended Reductions

	Amount	Budget Page	Line
Eliminate item 204	\$21,125	668	70
Reduce item 205 for hardwood utilization research	7,110	669	24

ANALYSIS AND RECOMMENDATIONS

Item No.	Title	Proposed Amount
202	White pine blister rust control	\$58,500
	This appropriation matches federal expenditures for the control of white pine blister rust disease and technical supervision of conservation camp crews doing control work on private timber lands. The Board of Forestry has approved about 182,000 acres of land within zones of infection that justify treatment.	
203	Wild land vegetation and soil mapping	118,252
	The United States Department of Agriculture and the University of California, under contract with the Division of Forestry, survey and map soil types in wild land areas of the state. Of the 25 million acres of these lands, 9 million acres have been surveyed in nine northern counties. About 300,000 acres are surveyed annually. Surveys are now being conducted in Butte, Yuba, Calaveras and Tuolumne Counties.	
204	Watershed research	21,125
	This appropriation is for payments to the United States Department of Agriculture for cooperative studies at the San Dimas Experimental Station in the Angeles National Forest in Los Angeles County. The Division of Forestry has provided financial support since 1947. The basic purpose of the work is to maintain the continuity of rainfall and stream flow records for the experiment station and to publish results of research in watershed management. In addition to this appropriation, the Division of Forestry also has available conservation camp crews that are frequently used at the station.	

The work being carried on appears to be a perpetual project with no clear objective.

We recommend that funds in the amount of \$21,125 for the division's support of the San Dimas Experimental Forest be deleted from the budget.

Fish and Game

Item 208

Department of Conservation—Continued

Item No.	Title	Proposed Amount
205	Forest and fire research ----- This item is for the support of 14 different research projects, field studies and investigations in such areas as fire prevention and control, forest pest control and economics of fire protection. The Division of Forestry is provided with some funds, through this appropriation, for equipment development. Cooperating agencies securing funds for other projects are the University of California and U.S. Department of Agriculture.	\$177,980

One of the projects is \$7,110 for hardwood utilization research. This project has the objective of finding ways to utilize various kinds of California hardwoods including tanoak and madrone. This objective is in contrast to other research projects which have an objective of disease or rodent control, fire prevention or forest regeneration. This appears to be the only project designed for developing uses of any particular species and we regard this type of research as the responsibility of private industry.

We recommend that the budget be reduced \$7,110 to delete funds for hardwood utilization research.

Item No.	Title	Proposed Amount
206	Geological exploration in cooperation with United States Geological Survey ----- The appropriation provides the matching funds for geological projects in cooperation with the federal government. This program is designed to provide information on the geologic occurrences of minerals of possible economic value.	\$27,000
207	State geologic map ----- This item concludes the state geologic mapping program in the budget year.	15,532

Some of the items in these miscellaneous cooperative and research programs include workload adjustments and all of the items include an undetailed reduction of 10 percent. Except for the recommended reductions of \$21,125 in Item 204 for watershed research and \$7,110 in Item 205 for hardwood utilization research, we are unable to make recommendations on the other items pending clarification of the 10 percent undetailed reduction.

DEPARTMENT OF FISH AND GAME

ITEM 208 of the Budget Bill

Budget page 672

FOR SUPPORT OF DEPARTMENT OF FISH AND GAME FROM THE FISH AND GAME PRESERVATION FUND

Amount requested -----	\$12,831,427
Estimated to be expended in 1966-67 fiscal year -----	12,734,260
Increase (0.8 percent) -----	\$97,167
TOTAL RECOMMENDED INCREASE -----	\$52,895

Department of Fish and Game—Continued

Summary of Recommended Changes

	Amount	Budget Page Line	
Terminate federal predatory animal control contract -----	\$25,000	682	44
Add reimbursement of General Fund for contract studies which should have been financed by the Fish and Game Preservation Fund -----	\$+77,895	699	44
Delete \$67,139 for Commercial Fisheries Research and De- velopment from General Fund (Item 211) and substi- tute funding from Marine Research Committee (Item 212) payable from the Fish and Game Preservation Fund.			

GENERAL PROGRAM STATEMENT

The Department of Fish and Game is responsible for administering and enforcing laws and programs pertaining to fish and wildlife resources. Article 4, Section 25 of the State Constitution establishes the Fish and Game Commission of five members appointed by the Governor. The commission regulates the taking of fish and game under delegation of legislative authority pursuant to the Constitution and establishes policies to guide the department in carrying on its activities. Division 1 of the Fish and Game Code specifies the general regulatory powers of the commission.

The department, headquartered in Sacramento, has approximately 1,225 employees located throughout the state. Field operations are supervised from the five regional offices located in Redding, Sacramento, Fresno, San Francisco and Los Angeles. The Marine Resources operations are conducted at the State Fish Laboratory at Terminal Island in San Pedro.

The department is a special fund agency financed through the Fish and Game Preservation Fund. It is supported by revenues from the sale of hunting and fishing licenses, court fines and commercial fish taxes, plus grants of federal funds, reimbursements from other agencies of government and some direct General Fund support to finance the state's share of programs authorized and financed by the Federal Commercial Fisheries Research and Development Act of 1964. The following table shows the source of funding for the department's support activities during the past five years.

The table indicates how the share of the department's expenditures financed from sources other than the Fish and Game Preservation Fund has increased over the five-year period. Whereas in 1963-64 the department received approximately 15 percent of its funding outside its own revenues, the proposed budget calls for about 20 percent of the department's expenditures to be financed from sources other than the Fish and Game Preservation Fund. This trend is mostly the result of commercial fisheries research programs financed by federal and General Fund moneys and an increase in fish and wildlife preservation and enhancement studies on state water projects financed by the Department of Water Resources.

On June 30, 1966, the accumulated surplus in the Fish and Game Preservation Fund was \$7,782,342, the highest balance on record. The department has kept its support programs well within its revenues and has not had to increase hunting and fishing license fees since 1957. The ability of the department to increase its surplus, however, reduces the necessity of General Fund financing for the state's participation in the

Department of Fish and Game—Support Expenditures

<i>Source of Funding</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67*</i>	<i>1967-68*</i>
Fish and Game Preservation Fund:					
Federal funds -----	\$11,038,606	\$11,593,493	\$12,108,810	\$13,176,135	\$13,267,247
General Fund -----	946,323	968,060	1,017,659	1,456,661	1,451,460
				70,279	74,599
Totals as shown in Governor's budget -----	\$11,984,929	\$12,561,553	\$13,126,469	\$14,703,075	\$14,793,306
Expenditures funded through reimbursements:					
Federal funds -----	349,623	350,831	483,111	472,450	493,385
Other (Department of Water Resources major source) -----	610,073	779,396	957,419	1,162,738	1,206,032
Total of all expenditures -----	\$12,944,625	\$13,691,780	\$14,566,999	\$16,338,263	\$16,492,723

* Estimated.

Department of Fish and Game—Continued

commercial fisheries research program. The department has begun to utilize some of its accumulated surplus for the nonrecurring replacement of capital equipment. During the current year the department is replacing radio equipment, and the capital outlay program for the budget year proposes a major expenditure of approximately \$1,575,000 to replace the research vessel, "N. B. Scofield." Therefore, the 1967-68 budget anticipates a reduction in the accumulated surplus at the end of the budget year to \$5,880,278, an amount almost equal to half of the department's annual support costs.

It is difficult to estimate precisely the revenues that the department will receive in any budget year. Since fiscal year 1963-64, the budgets prepared by the department have underestimated the amount of revenue by considerable amounts. In 1963-64 the actual revenue was more than \$1 million greater than had been estimated at the time of budget preparation and the 1964-65 and 1965-66 actual revenues were similarly underestimated more than \$800,000 each year.

The proposed budget shows department support programs totaling \$16,492,723. Of that amount, \$13,267,247 will come from the Fish and Game Preservation Fund and the department requests appropriations for that amount through this and following items of the budget bill. The support portion of the department's budget increases only \$97,167 next year. Included in the budget are 25.6 new positions and a reduction of 18 other positions. Staffing on a workload basis is allowed at two new hatcheries, the American River and the Feather River hatcheries.

The Department of Finance plans to introduce amendments to the Budget Bill allowing some workload increase above that which appears for the Department of Fish and Game in the Governor's printed budget, less a 10 percent reduction in the total amount of the support budget. This analysis covers only the printed Governor's Budget and does not consider possible unknown future revisions to it.

The department has prepared a program budget for informational purposes and this analysis is prepared based on the program descriptions provided by the department. These programs include:

- Enforcement of Laws and Regulations,
- Inland Fisheries Preservation and Enhancement,
- Wildlife Preservation and Enhancement,
- Marine Resources Preservation and Enhancement,
- Water Projects and Water Quality Review,
- Management Services.

ANALYSIS AND RECOMMENDATIONS**Enforcement of Laws and Regulations**

The enforcement of laws and regulations seeks to protect fish and wildlife and their habitat. Current expenditures for the program are almost \$5,400,000. The department has a staff of 220 fish and game wardens who patrol to prevent violations, issue warnings and citations, check licenses of hunters and fishermen, apprehend fish and game law violators and assist in the presentation of court cases. There are approximately 700,000 hunters and 1,800,000 fishermen in California to-

Department of Fish and Game—Continued

day and the wardens make nearly 16,000 arrests annually for fish and game violations.

Pursuant to a request by the Subcommittee on Standards, Procedures and Reporting of the Ways and Means Committee, the department recently completed a study of the manpower and staffing criteria of the wildlife protection branch. The study developed recreational fishing and hunting man-days-use as the basis of the wardens' workload, and established areas of similar working conditions by dividing the state into six geographic zones. The study report indicates that in 1963 each of the zones had adequate manpower, but the zones were not necessarily staffed so that each warden was responsible for a relatively equal amount of man-days-use. The report does not recommend the relocation of any wardens. For future staffing needs, the report refers to the department's fish and wildlife plan, which states that the use of the wildlife resources will increase 68 percent by 1980. With that rate of increase over the 17 years from 1963 to 1980, the average annual increase in workload is 4 percent and the report recommends that the wildlife protection branch should plan staffing needs on that basis. However, no new positions are requested for next year. Before the department requests any additional warden positions in future years, wardens should be transferred from areas where the study indicates the department is overstaffed to those areas needing additional staff.

The objective of the licensing program is to collect the revenue which provides most of the financial support for the state's fish and game programs. The licenses are sold through about 3,400 private firms called "license agents," located throughout the state. These agents sell the licenses, retain a commission and remit the balance to the department. The cost of the license management program is estimated at \$285,000. When added to the \$434,744 commission to be retained by the agents, the total estimated cost of selling licenses is \$719,744 or about 5½ percent of the total estimated revenue of \$13,307,148 from licenses, permits and tag sales.

In the hunter safety program, the department recruits and trains over 3,000 volunteer instructors who teach young people under 18 the safe handling of firearms. Finally, the department proposes to spend approximately \$360,000 in the Conservation Education program for public information about the use and protection of fish and wildlife resources of the state.

Inland Fisheries Preservation and Enhancement

The objective of the inland fisheries preservation and enhancement program is to provide a diversified fishing activity for the anglers in the state's interior waters while insuring the perpetuation of the state's fishery resource. Annual expenditures for this program approximate \$3,200,000. There are more fishermen than California's natural fisheries can support, and the department operates hatcheries to produce fish to meet the recreational demand. Trout are California's most popular sport fish. The department produces this species in 12 state hatcheries. Each year the department stocks about 15 million fingerling trout in

Department of Fish and Game—Continued

nearly 1,000 lakes and about 7 million catchable trout in 1,300 miles of streams and 170 lakes.

During the budget year, the American River Hatchery at Nimbus is scheduled to begin operations. The budget includes five new positions and related expenses for the hatchery which is being constructed by the Wildlife Conservation Board with 1964 Recreation Bond Act money.

In addition to the trout element of the program, the department proposes to continue its studies on striped bass and sturgeon and problems concerning the increasing salinity of the Salton Sea, the regulation and enhancement of natural fishery habitat through chemical reclamation of lakes and streams, some fish disease control activity and the management and development of habitat for black bass and other warm water game fish.

Pursuant to ACR 88 of the 1965 Session, the budget includes \$13,800 for the cooperative fisheries research and training unit at Humboldt State College. This program functions under a cooperative agreement between the college, U.S. Fish and Wildlife Service and the Department of Fish and Game. The unit is designed to train fishery biologists, primarily graduate students, and carry out research projects. Departmental representatives will participate in the review and approval of research projects undertaken by the students, and hopefully, the department will gain a source of scientists for its research programs.

Wildlife Preservation and Enhancement

The Department of Fish and Game carries on substantial programs for the management of waterfowl, big game and upland game. Current expenditure levels are estimated at about \$2,775,000. Almost \$1 million is expended to increase and regulate the natural wildlife habitat through the development of springs, guzzler installations, brush manipulation and crop planting. Also, the department spends about \$330,000 maintaining and improving the state's wetland habitat for waterfowl. The most intensive management of habitat takes place on the state's six waterfowl management areas.

Each year about 400,000 people hunt for deer in California. The 39 wildlife management units within the state gather field data on herd composition, hunter kill, disease and range conditions and make recommendations for seasons and special hunts. The department's current expenditures for deer and big game are approximately \$450,000.

The department carries on programs to manage certain upland game populations in the state. These programs amount to about \$460,000 in expenditures. This year the department will close the game farm at Chino and will purchase 19,500 pheasants under contract by competitive bid for release in southern California. The department will continue its game farm at Vacaville where pheasants are raised.

To increase the hunting opportunities, the department conducts public hunting on the state managed waterfowl areas and the deer ranges of the state. In addition, about 50,000 acres of leased private lands under the supervision of the department are open to hunting. Current expenditures are approximately \$300,000. The department also licenses and monitors commercial and private hunting clubs.

Department of Fish and Game—Continued

The department proposes to continue its wildlife disease control activities at the current level of about \$80,000 annually. The department determines the causes of wildlife losses and recommends control procedures to eliminate or minimize the losses, and performs a surveillance of private game breeder facilities and inspects game species imported from out of state. Pheasant pesticide investigations will be continued along with other activities in research and surveillance with the goal of identifying and abating fish and wildlife loss due to pesticide.

Predatory Animal Control

Pursuant to a request made by the Assembly Ways and Means Subcommittee during its consideration of the 1966-67 budget for the California Department of Agriculture, this office has reviewed the organization and activities of the predatory animal control program in California. For a number of years the California Department of Fish and Game has maintained a predator control contract with the U.S. Bureau of Sport Fisheries and Wildlife for the protection of deer against coyotes. Under this contract, the bureau performs the work on a reimbursable basis as specified by the department. The department has had long-standing reservations about the value of this work and has reduced the scope and amount of the contract from a high of \$250,000 10 years ago to a present level of \$25,000. In 1958, the department sought to eliminate the contract work on the ground that it could not be justified because of an over abundance of deer, but the program was continued at the \$25,000 level for control work in Trinity, Plumas, Tulare and Fresno counties following the adoption of Senate Concurrent Resolution No. 40 by the 1959 Legislature. That resolution directed the department either to "allocate sufficient funds to the Federal Fish and Wildlife Service to insure that it will have sufficient funds for adequate predator control or provide adequate predator control by department personnel." Although the Department of Fish and Game has maintained a minimal predator control contract in response to this legislative directive, the department still feels that the work cannot be justified from a wildlife management point of view because the California deer population remains high in relation to its habitat.

The federal government which executes the program for the state has adopted new guidelines for all of its predator control activities. The department must now show how the coyotes adversely affect wildlife or otherwise justify the predator control work performed in its behalf by the Federal Bureau of Sport Fisheries and Wildlife. The contract between the State Department of Fish and Game and the federal government for the current year has not yet been executed. As of the time of this writing, the contract was awaiting approval of the Department of General Services. The Department of Fish and Game has prepared a letter to the bureau attempting to justify the program, but the problem of meaningful justification of the expenditure remains.

Due to lack of justification based on wildlife management objectives, we are unable to recommend that the predator control contract be renewed.

Department of Fish and Game—Continued

We recommend that \$25,000 for a predatory animal control contract with the United States Department of Interior be deleted from the budget.

Marine Resources Preservation and Enhancement

For many years California has financed extensive programs involving marine resources. The current expenditure level is about \$3,250,000. In recent years the competition between the sportsmen and the commercial fishermen for use of the resource has become keen. Management of the resources is complicated by the fact that many of our marine species are utilized by other nations and by other states. What California can accomplish, then, in relation to these marine species, is largely proportional to the cooperation from other nations and states.

The elements of the marine resources programs include salmon and steelhead, tuna, pelagic fisheries, bottom fish, shellfish, marine sport fish, special investigations and biostatistics.

In terms of both manpower and dollars, the department puts more effort in the activities concerned with salmon and steelhead than with any of the other activities in the marine resources program. Expenditures approximate \$1,500,000 and include activities in production and propagation, the development of screens and ladders, some habitat management, the collection of catch statistics, with some cooperative endeavors with neighboring states mostly in the exchange of information and coordination of research work.

A new federal program under the Anadromous Fish Act (PL 89-304) will provide some assistance to California in problems concerning anadromous fish; i.e., those fish which spawn in the streams and migrate to the ocean. The objective of the act is to restore and improve anadromous fish populations for which the Bureau of the Budget has made \$2 million available nationwide for the 1966-67 fiscal year. About \$390,000 is available to California this year as federal matching funds for eligible projects. The Department of Fish and Game has decided to use the federal moneys for construction projects and has assigned expenditure of the funds to the Wildlife Conservation Board. The board plans to use the funds to construct some fish screens and give some assistance on the Mad River Hatchery.

The proposed budget includes reimbursement of \$167,000 from the Department of Water Resources to begin operations of the Feather River Hatchery at Oroville. About 10 new positions will be needed at the hatchery and are included in the budget.

The department will continue its research activities on tuna, the pelagic fishery resources, the current use and condition of bottom fish, management of the shellfish fishery, surveys of marine sport fish catch and the collection, compilation and publishing of data and statistics of the commercial fishing industry.

Commercial Fisheries Research

For the second year the budget proposes the use of General Fund money to match federal funds available under the Commercial Fisheries Research and Development Act of 1964 (PL 88-309). The purpose of the federal act is to provide financial aid to the states for research and

Department of Fish and Game—Continued

development of their commercial fisheries. The department began programs with federal funds in 1965-66 and during the current year has developed activities to utilize most of its federal money available under the program. The proposed budget shows a slight increase in total appropriations for these programs with a request of \$298,395 to be financed by \$223,796 in federal funds and \$74,599 from the General Fund. The programs include the fisheries resources sea survey, the food habits study, shellfish laboratory operations and the collection of data on shellfish and bottom fish.

Until the current year, research on ocean fisheries was financed either by the Fish and Game Preservation Fund or by revenues available to some other agency such as the Marine Research Committee or research funds of educational institutions. General Fund financing of this program was advanced last year and accepted by the Legislature on the basis that the commercial fishing industry is not financially able to support the program from a special tax, that the federal moneys appropriated for these purposes are from general revenues of the federal government, and that the sportsmen of California are already partially supporting research and management of commercial ocean fisheries and should not be expected to support any new programs. With the shortage of General Fund revenues, we are unable to recommend continued funding of the state's portion of the commercial fisheries research program from the General Fund.

Commercial fisheries research is the responsibility of the Marine Research Committee. Section 729 of the Fish and Game Code describes the purpose of the Marine Research Committee as "... financing research in the development of commercial fisheries in the Pacific Ocean and of marine products susceptible to being made available to the people of California." The programs of the committee are financed from a privilege tax of 5 cents for each 100 pounds of sardines, Pacific and jack mackerel, squid, herring and anchovies. The privilege tax expires December 31, 1967; however, the Legislature has extended the expiration of the tax at each General Session.

The Marine Research Committee requests an appropriation in item 212 of \$87,190, an amount identical to estimated expenditures during the current year. This amount compares to \$123,500 which is the amount requested and appropriated by the Legislature for the committee's activities during the current year. Last year the committee anticipated considerable revenue from the taking of anchovies for reduction purposes. However, the landings were disappointing and only about \$17,000 was realized in contrast to the \$75,000 in anticipated revenue, which represented the maximum taking under the Fish and Game Commission rulings. The proposed budget for the committee anticipates revenue of \$225,300 which is more than double the estimated revenue for the current year. There is no indication provided as to the source of the additional revenue. The Department of Fish and Game predicts that about 50,000 tons of anchovies will be taken for reduction purposes during the current year. With its large amount of anticipated revenue, the Marine Research Committee budget predicts an operating

Department of Fish and Game—Continued

reserve at the end of the budget year of \$183,271, an amount more than twice the state matching fund requirements under the commercial fisheries research program for the 1967-68 fiscal year. Thus the Marine Research Committee could finance the state portion of the commercial fisheries program even if its revenues are greatly reduced to a more realistic level.

The budget request for the Marine Research Committee indicates that the organization lacks objectives and has a weak research program. The budget includes funding of committee expenses for travel, accounting, printing and some secretarial services, and one definite research contract, represented by an allocation of \$9,000 for a study of anchovies to be done by the California Academy of Science for coordination of the marine research program. Even at this late date, the current year budget shows \$10,000 for unallocated contracts. During the current year the committee has allocated some of the originally budgeted unallocated moneys of \$51,000 for such projects as \$5,000 to the U.S. Bureau of Commercial Fisheries to help with the automatic data processing of egg and larva records and \$5,000 to the Scripps Institute of Oceanography to assist in the publication of atlases.

In view of the substantial commercial fisheries research programs being financed largely by federal funds, the Marine Research Committee funds would be more appropriately spent in providing the state's matching expenditures for the new federal programs rather than for miscellaneous projects which may come to the attention of the committee, projects which have not been shown to constitute an organized approach to research objectives.

We recommend that item 211 of the Budget Bill, budget page 686, analysis page 731, for support of commercial research and development payable from the General Fund be deleted; that item 212 payable from the Fish and Game Preservation Fund for support of the Marine Research Committee be amended to include \$74,599 for support of the commercial fisheries research and development programs.

Water Projects and Water Quality Review

The department's objectives in the water projects and water quality review programs are to protect and augment existing fish and wildlife resources in connection with the development of the state's water resources and to provide technical assistance to other agencies which have functions related to fish and wildlife. These programs amount to approximately \$1,600,000 funded almost equally by the Fish and Game Preservation Fund and by reimbursements, mostly from the Department of Water Resources.

The department carries out basic water quality research related to fish, wildlife or aquatic environment, performs onsite investigations of existing pollution problems, makes field and laboratory investigations on specific water quality problems and furnishes data on water quality problems for the regional water pollution control boards. The department reviews and makes recommendations on applications filed with the State Water Rights Board for permits to appropriate water, on applications with the State Department of Water Resources to construct

Department of Fish and Game—Continued

or modify dams, on water projects to be constructed by federal agencies, on projects of the Federal Power Commission, on the State Water Project and on highway and Davis-Grunsky projects.

The Department of Water Resources is responsible for the preservation and enhancement of fish and wildlife at the State Water Project and for the engineering aspects of fish and wildlife at other water projects. The Department of Water Resources contracts with the Department of Fish and Game for technical personnel from the Department of Fish and Game to assist it.

Under contract with the Department of Water Resources, the Department of Fish and Game has undertaken major works on the Delta Fish and Wildlife Protection Study. Last year, work was completed under the original five-year contract and the peripheral canal was recommended as the best concept to protect and enhance fish and wildlife. Under a new contract studies are proposed to develop operating criteria for the Delta water facilities to protect and enhance the fish and wildlife resources. The proposed budget indicates some reduction in fund allocations for this study from a level of about \$400,000 to about \$360,000 and five less personnel assigned to the study.

In our analysis of the budget of the Department of Water Resources we are recommending a significant reduction in the contract work with the Department of Fish and Game until Water Resources establishes definite policies to limit and control the contract work. If adopted, this recommendation will result in some reduction of the contract work done by Fish and Game.

Management Services

The program budget for the department itemizes about \$1,500,000 in management services costs which are prorated to the programs on the basis of the ratio of the cost of each program to the total cost of the department's programs. Management services include the Fish and Game Commission, departmental and regional administration and legal, engineering, personnel, planning and fiscal services.

During the current year the department has held a number of hearings on the California Fish and Wildlife Plan which was completed during the 1965-66 fiscal year. During the current and budget years effort will be devoted to the preparation of species plans by outlining current operations and habitat problems and developing solutions to these and future problems. Personnel in staff operations will be responsible for the development of the plans while three positions assigned directly to the planning function have been budgeted at \$50,000 in the 1967-68 year compared to approximately \$90,000 in the current year to coordinate the work. No money from the Land and Water Conservation Fund is requested for planning purposes in the 1967-68 budget.

In our analysis of the budget for the Department of Fish and Game last year (page 743), we discussed the relationship of the department's responsibilities to other work in the San Francisco Bay Area. We noted that the department had budgeted \$25,000 to begin a San Francisco Bay Fish and Wildlife protection study and that the department had indicated it could absorb much of the work which might need to be

Department of Fish and Game—Continued

done for San Francisco Bay studies. As a result the department did not budget last year any special work relating to either the activities of the San Francisco Bay Conservation and Development Commission or the San Francisco Bay-Delta Waste Water Management Study of the State Water Quality Control Board.

In recent months the department negotiated a contract with the Bay Conservation and Development Commission under which an expenditure of \$5,895 was made by the department for a study entitled Preliminary Fish and Wildlife Plan for San Francisco Bay-Estuary dated October 1966. In December, the department negotiated a contract with the State Water Quality Control Board to provide for \$72,000 in staff services for the San Francisco Bay-Delta Waste Water Management Study. In both instances, these studies cover work financed by the General Fund which is appropriately the responsibility of the Department of Fish and Game for the protection and preservation of fish and wildlife resources in the San Francisco Bay and Delta areas. Consequently, these studies should have been financed by the department from the Fish and Game Preservation Fund. *It is, therefore, recommended that the sum of \$77,895 be appropriated to the Department of Fish and Game from the Fish and Game Preservation Fund for transfer to the General Fund as reimbursement for the work financed by the General Fund.*

With the deletion of General Fund financing of the Commercial Fisheries Research and Development program (Item 211), the reduction of \$25,000 in the Predatory Animal Control Program and the above reimbursement of \$77,895, we recommend approval of the department's request as budgeted.

Department of Fish and Game

PROGRAMS IN COOPERATION WITH THE FEDERAL GOVERNMENT

ITEM 209 of the Budget Bill

Budget page 689

SUPPORT OF GAME AND FISH MANAGEMENT IN COOPERATION WITH THE FEDERAL GOVERNMENT FROM THE FISH AND GAME PRESERVATION FUND

Amount requested	\$1,636,884
Estimated to be expended in 1966-67 fiscal year	1,661,100

Decrease (1.4 percent)	\$24,216
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TOTAL RECOMMENDED REDUCTION	None
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ANALYSIS AND RECOMMENDATION

These programs of cooperative fish and wildlife management projects are based upon federal legislation, the Pittman-Robertson and the Dingell-Johnson Acts. Federal funds are derived from an excise tax on sporting arms and ammunition and sport fishing tackle and equipment. The federal government pays 75 percent of the cost of approved projects while the state pays 25 percent. The budget proposes expenditures of \$409,220 from the Fish and Game Preservation Fund to provide the 25 percent state participation. Federal grants are estimated at \$1,227,664, bringing the total cost to \$1,636,884. Of this total,

Department of Fish and Game—Continued

\$1,129,375 is for game management and \$507,509 is for fish management.

The discussion of the programs funded by this item is included in the analysis of Item 208, the support of the Department of Fish and Game.

We recommend approval.

**Department of Fish and Game
PACIFIC MARINE FISHERIES COMMISSION**

ITEM 210 of the Budget Bill

Budget page 699

**FOR SUPPORT OF PACIFIC MARINE FISHERIES COMMISSION
FROM THE FISH AND GAME PRESERVATION FUND**

Amount requested	\$26,600
Estimated to be expended in 1966-67 fiscal year	26,600
Increase	None
TOTAL RECOMMENDED REDUCTION	\$26,600

Summary of Recommended Reductions

	<i>Amount</i>	<i>Budget Page</i>	<i>Line</i>
Delete the appropriation	\$26,600	699	35

ANALYSIS AND RECOMMENDATIONS

The Pacific Marine Fisheries Commission was established by an interstate compact in 1947 to promote better utilization of fisheries and to develop a joint program of protection and prevention of physical waste of the ocean fisheries which are of mutual concern to the states of California, Oregon and Washington. Congress amended the compact in 1962 to permit entry of Alaska or Hawaii or any state having rivers tributary to the Pacific Ocean. In 1964, Idaho joined the compact.

The commission is headquartered in Portland, Oregon, and the staff consists of an executive director and a secretary along with some occasional temporary help.

Funds for the support of the commission come from the member states and are determined in proportion to the primary market value of the products of their fisheries, provided that no state shall pay less than \$2,000 per year. The 1965 funding was as follows:

California	\$26,600
Oregon	3,800
Idaho	2,000
Washington	10,500
Total	\$42,900

The latest available statement of receipts and disbursements is for the year ending October 31, 1965, in which the commission spent \$36,551. Of that amount, the major items of expense were:

Staff	\$22,994
Annual and research meetings	8,382
Office supplies and maintenance	1,416
Rent	1,108

A large proportion of the meeting costs is for travel although it is not designated as travel. At the last meeting of the commission in Seattle,

Department of Fish and Game—Continued

it paid the travel costs of five Department of Fish and Game employees plus California's three commissioners and California's five members of the advisory committee. Presumably the same payment of travel costs for other states also occurred. California was also represented by five other personnel paid from state and federal funds giving a total of eighteen California representatives.

Last year in the Analysis we pointed out that the purpose of the organization is to promote fisheries of "mutual concern" to the members but that the funding for the commission is on the basis of fish landings in the states. The tuna landings in southern California are of little interest to the commission and are the main reason for the heavy contribution required of the State of California. The funding of the commission should be based on fisheries of "mutual concern" consistent with the purpose of the organization.

The California Department of Fish and Game has presented to the commission proposals to increase the contributions of the other member states. The recommendation is to be considered by the commission next spring; however any revision in funding would require changes in the federal legislation.

This is a low priority program of the Department of Fish and Game. There are benefits to be derived from meeting with neighboring states and discussing problems of mutual concern; however, the value of a staffed organization requiring financing from each of the states is debatable in view of the limited accomplishments. A review of the department's travel requests indicate that there are numerous occasions when representatives of the department meet with neighboring states to discuss mutual problems exclusive of the commission's activities.

The department feels the commission was valuable in settling problems resulting from different crab and shrimp seasons for California and Oregon. In addition, the commission finances the state's portion of the commercial fisheries program of port sampling at Crescent City, Brookings and Port Orford, an amount estimated at \$2,800 in the budget. The point remains, however, that almost all the expenditures of the commission go to finance the office and salaries in Portland, Oregon plus the expenses of holding the annual meeting.

Although there are major policy implications involved which the Legislature should consider in continuing California's participation under the PMFC interstate compact, the state's participation in the commission has limited value from a fiscal point of view, compared to its high costs, and we recommend the appropriation be deleted.

Department of Fish and Game

PROGRAMS IN COOPERATION WITH THE FEDERAL GOVERNMENT

ITEM 211 of the Budget Bill

Budget page 686

FOR SUPPORT OF COMMERCIAL FISHERIES RESEARCH AND
DEVELOPMENT PROGRAM FROM THE GENERAL FUND

Amount requested in Budget Bill	\$67,139
Budget request before identified adjustments	\$74,599
Adjustment—undetailed reduction (10 percent)	7,460

Department of Fish and Game—Continued

**RECOMMENDED REDUCTION FROM APPROPRIATION
REQUEST** -----

\$67,139

Summary of Recommended Reductions

Eliminate General Fund appropriation. Fund this program with Marine Research Committee appropriation (Item 212) payable from the Fish and Game Preservation Fund.

ANALYSIS AND RECOMMENDATIONS

Public Law 88-309, the Commercial Fisheries Research and Development Act of 1964 was enacted to help state agencies carry out projects to research and develop the nation's commercial fisheries resources. Congress has authorized \$5 million of federal General Fund revenues for each of the next four years to carry out the purposes of the act. This item provides the state's portion of the programs which are described in the program analysis of the Department of Fish and Game Budget on page 725 of the analysis.

We recommend approval of the program to be carried out by the department but have recommended alternate financing from the Marine Research Committee and the Fish and Game Preservation Fund in lieu of General Fund financing of the state's portion.

**Department of Fish and Game
MARINE RESEARCH COMMITTEE**

ITEM 212 of the Budget Bill

Budget page 701

**FOR SUPPORT OF MARINE RESEARCH COMMITTEE
FROM THE FISH AND GAME PRESERVATION FUND**

Amount requested -----	\$87,190
Estimated to be expended in 1966-67 fiscal year -----	87,190

Increase -----	None
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TOTAL RECOMMENDED INCREASE -----	\$9,409
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Summary of Recommended Increase

Increase appropriation \$9,409 and allocate \$74,599 to finance state's share of the Commercial Fisheries Research and Development program.

POLICY OPTION

Abolish the committee.

ANALYSIS AND RECOMMENDATIONS

The Marine Research Committee consists of nine members appointed by the Governor. Most of the members represent the commercial fishing industry. As provided in Section 8046 of the Fish and Game Code, support for the committee comes from a privilege tax of 5 cents for each 100 pounds of sardines, Pacific and jack mackerel, squid, herring and anchovies taken by commercial fishermen.

Section 729 of the Fish and Game Code states that the purpose of the Marine Research Committee is to finance "... research in the development of commercial fisheries of the Pacific Ocean and of marine products susceptible to being made available to the people of California." The committee enters into contracts with such agencies as the

Department of Fish and Game—Continued

California Academy of Sciences, Scripps Institute of Oceanography and the Department of Fish and Game to carry on research activities.

The committee requests appropriations of \$87,190 for the 1967-68 budget, an amount identical to estimated expenditures in the current year. In the analysis of the Department of Fish and Game budget, page 727 of the analysis, we have indicated that the budget request for the Marine Research Committee lacks firm objectives in the research program and have recommended that the committee finance the state's share of the cost for cooperation in the federal commercial fisheries research program under PL 88-309. The only research activity of any consequence indicated in the committee's budget is a \$9,000 contract for anchovy studies by the California Academy of Sciences. The budget includes \$25,190 for unallocated contracts and \$40,000 to the California Academy of Science for coordination of the Marine Research Program.

In addition to difficulties developing a research program, the committee has been without a coordinator for over one year. These factors indicate that the tax moneys would be more appropriately spent to finance the state's share of the commercial fisheries research and development program.

In 1965 the Fish and Game Commission approved the taking of 75,000 tons of anchovies annually. However, in the first year of operations, only 17,000 tons were taken by commercial fishermen. The Department of Fish and Game estimates that approximately 50,000 tons will be taken in the current year. This fishery provides some increase in revenues to the Marine Research Committee. The proposed budget indicates revenues in the budget year of \$225,300, more than double the estimated revenues in the current year. The budget provides no justification for such an optimistic revenue estimate.

The availability of federal funds under the Commercial Fisheries Research and Development Act to finance research and development of commercial fisheries has shifted responsibility for such work from the Marine Research Committee to the Department of Fish and Game. For this reason and because of the failure of the committee to establish program objectives and resolve staffing problems, *we recommend that the funds of the Marine Research Committee be made available to finance the state's portion of the Commercial Fisheries Research and Development program rather than using General Fund money.*

Utilizing \$9,409 of the committee's \$183,271 reserve, the \$25,190 budgeted for unallocated contracts and \$40,000 budgeted for coordination, the committee can easily finance the state's share of the program.

POLICY OPTION

In view of the lack of firm research objectives on the part of the Marine Research Committee and its failure to resolve longstanding staffing problems, we have recommended above that the committee use its funds to finance the state's share of the Commercial Fisheries Research Program. If the Legislature does not elect to follow that recommendation, we suggest that the privilege tax supporting the committee not be renewed and that the Marine Research Committee be abolished.

**Department of Fish and Game
WILDLIFE CONSERVATION BOARD**

ITEM 213 of the Budget Bill

Budget page 702

**FOR SUPPORT OF WILDLIFE CONSERVATION BOARD
FROM THE WILDLIFE RESTORATION FUND**

Amount requested -----	\$100,217
Estimated to be expended in 1966-67 fiscal year -----	100,217

Increase -----	None
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TOTAL RECOMMENDED REDUCTION -----	\$100,217
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Summary of Recommended Reductions	Amount	Budget Page	Line
Eliminate support from money which otherwise would be received by the General Fund -----	\$100,217	702	58

GENERAL PROGRAM STATEMENT

The Wildlife Conservation Board, established in 1947, consists of the President of the Fish and Game Commission, the Director of the Department of Fish and Game, and the Director of Finance. Three Members of the Senate and three Members of the Assembly act as an advisory group and an interim investigating committee. The board has a staff of six. The board's function is to acquire and restore areas to sustain wildlife and provide recreation.

As authorized in Section 19632 of the Business and Professions Code, the board's program is supported from the annual diversion of \$750,000 of horse race license revenues to the Wildlife Restoration Fund from money which would otherwise go to the General Fund. Projects authorized and constructed by the board from these funds are not subject to budget bill appropriation although we have recommended this appropriation in past analyses. This item only appropriates funds for the support of the board's staff from the Wildlife Restoration Fund.

ANALYSIS AND RECOMMENDATIONS

In the early years of operation of the Wildlife Conservation Board, funds were allocated mostly for such large capital outlay projects as hatcheries and waterfowl management areas. However, the board did not provide funds for the maintenance and operation of the newly acquired facilities. The responsibility for the upkeep of the facilities fell upon the Department of Fish and Game and became a drain on department revenues. Since that time the board has shifted the emphasis of its continuing program to the development of projects for which there is assurance that maintenance and operation will be provided by a local agency. In the construction of fishing piers, the board has adopted a policy of matching local expenditures on a 50-50 basis.

As of August 1966, the Wildlife Conservation Board has allocated over \$20 million for projects in almost every county as follows:

Project	Amount
Fish hatchery and stocking projects -----	\$4,554,499
Fish habitat development and improvement -----	2,902,091
Angling access projects (includes both launching ramps and piers) -----	6,341,340
Game farm projects -----	146,894

Department of Fish and Game—Continued

<i>Project</i>	<i>Amount</i>
Game habitat development and improvement projects -----	6,023,544
Hunting access -----	473,712
Miscellaneous -----	296,797
Total allocated to specific projects -----	\$20,738,877

It can be seen from this table that most of the money expended by the Wildlife Conservation Board, which is nominally General Fund money, has gone for the direct benefit of hunters and fishermen. The Department of Fish and Game operates a program to benefit these sportsmen using their license fees for support. General Fund support for the Wildlife Conservation Board is an exception to this principle and should not continue because of the need for General Fund money for other statewide programs of general public interest.

In addition to the \$750,000 continuing appropriation, the board has recently received financial support for its program from additional sources. The Recreation Bond Act of 1964 includes \$5 million to finance projects for the Wildlife Conservation Board. Expenditures from these bond funds require legislative appropriation and so far the Legislature has appropriated almost \$2,600,000 of the bond moneys leaving approximately \$2,400,000 remaining as the board's share of the unexpended bond money. The bond funds appropriated thus far are being used to modernize, automate and construct fish hatcheries, purchase some lands for hunting access and construct artificial reefs in southern California. The board is not requesting the appropriation of any bond funds in the 1967-68 Budget.

In addition to the park bond funds available to the board, some money from two federal programs has been made available to the Wildlife Conservation Board. These moneys stem from Public Law 88-578, the Land and Water Conservation Act, and Public Law 89-304 the Anadromous Fish Act. During the current year the board was allocated approximately \$400,060 in Land and Water Conservation Fund Money which will be used to acquire lands for access purposes along the American and Sacramento rivers. Under the Anadromous Fish Act, the board may receive funds for projects to construct screens, ladders and hatcheries for anadromous fish.

In view of the shortage of General Fund revenues, the annual transfer of \$750,000 of horserace license revenues to the Wildlife Restoration Fund, should be terminated. To the extent that federal moneys require matching funds, these funds should be appropriated from the Fish and Game Preservation Fund through the Department of Fish and Game.

We recommend that the Legislature repeal Section 19632 of the Business and Professions Code which transfers \$750,000 annually to the Wildlife Restoration Fund and that the Wildlife Conservation Board be financed from the Recreation Bond Act of 1964 and such federal funds as may be provided.

Harbors and Watercraft**Items 214-215****DEPARTMENT OF HARBORS AND WATERCRAFT****ITEM 214 of the Budget Bill****Budget page 703****FOR SUPPORT OF THE DEPARTMENT OF HARBORS AND WATERCRAFT FROM THE GENERAL FUND**

Amount requested in Budget Bill	\$5,202
Budget request before identified adjustments	\$5,780
Increase to recognize full workload change	None
Budget as adjusted for workload change	\$5,780
Adjustment—undetailed reduction (10 percent)	578

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET None**BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING** \$578**ANALYSIS AND RECOMMENDATIONS**

This item provides General Fund support for the department's review of federal navigation permit applications.

DEPARTMENT OF HARBORS AND WATERCRAFT**ITEM 215 of the Budget Bill****Budget page 703****FOR SUPPORT OF DEPARTMENT OF HARBORS AND WATERCRAFT FROM THE HARBORS AND WATERCRAFT REVOLVING FUND**

Amount requested	\$988,214
Estimated to be expended in 1966-67 fiscal year	943,574

Decrease (0.6 percent)	\$5,360
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TOTAL RECOMMENDED REDUCTION \$5,000**Summary of Recommended Reductions**

	<i>Amount</i>	<i>Budget Page</i>	<i>Line</i>
Reduce printing expense	\$5,000	704	21

Other Recommendations

Submit revised approach to Boating Development Program before budget request is approved.....Analysis page 739

GENERAL PROGRAM STATEMENT

The Department of Harbors and Watercraft administers several programs of grants and loans for boating facilities development projects and carries out a boating safety and control program. The policies for the department, which includes about 75 employees, are set by the Harbors and Watercraft Commission. The commission consists of seven members appointed by the Governor. The department's programs are supported by the annual transfer of \$4 million from the Motor Vehicle Fuel Fund to the Harbors and Watercraft Revolving Fund and the revenues from boat registration fees. The money from the Motor Vehicle Fuel Fund is derived from boat fuel taxes.

The department was formerly the Division of Small Craft Harbors within the Department of Parks and Recreation. Pursuant to Chapter 61, Statutes of 1966, First Extraordinary Session, the Department of Harbors and Watercraft was created within the Resources Agency and the former division was abolished. The statutory responsibilities of

Department of Harbors and Watercraft—Continued

the department appear in Division 1 of the Harbors and Navigation Code and in the California Administrative Code.

This item provides the department's support appropriation of \$938,214 from the Harbors and Watercraft Revolving Fund, an amount slightly less than estimated expenditures of \$943,574 in the current year. Item 214 provides the General Fund support of \$5,202 for the state's review of navigation permits referred to it by the U.S. Army Corps of Engineers. Funds for the boating facilities development program are appropriated in the local assistance section, Items 287 and 288. The budget proposes that the Harbors and Watercraft Revolving Fund repay the General Fund for loans made by the latter fund for boating purposes. This repayment is discussed in Items 290 and 291.

Department of Harbors and Watercraft—Support Expenditures

Source of funding	1963-64	1964-65	1965-66	1966-67	1967-68 ¹
Harbors and Watercraft					
Revolving Fund ²	\$418,908	\$653,226	\$831,665	\$943,574	\$938,214
General Fund	106,785 ³	--	--	5,780 ⁴	5,780 ⁴
Total as shown in Governor's Budget	\$525,693	\$653,226	\$831,665	\$949,354	\$943,994
Reimbursements:					
Occasional sales tax program, General Fund	--	--	69,872	78,495	78,495
Total of Expenditures	\$525,693	\$653,226	\$901,537	\$1,027,849	\$1,022,489

¹ Estimated.

² Prior to October 6, 1966, this fund was the "Small Craft Harbor Revolving Fund."

³ Prior to July 1, 1964, the General Fund provided support for boat registration.

⁴ Review of federal navigation permit application.

The above table indicates a substantial, two-fold growth in the size of the department's support budget over the past five years while a similar table for its grants and loans on page 946 shows no equivalent increase. The General Fund supports the cost of services to the Board of Equalization for enforcing the tax on occasional boat sales and for navigation permits.

The Department of Finance plans to introduce amendments to the budget for the department allowing some workload increase less a 10-percent reduction in the total amount of the support budget. This analysis covers only the printed Governor's Budget and does not consider possible unknown future revisions to it.

The department has prepared a program budget for informational purposes and this analysis is based on the program descriptions provided by the department. The two programs are Boating Facilities Development and Boating Safety and Control.

ANALYSIS AND RECOMMENDATIONS

Boating Facilities Development

By means of the boating facilities development program the department administers loans and grants to assist local agencies in the construction of small craft harbors and facilities. Local agencies submit applications for state assistance which the department reviews to determine feasibility. The elements of the program include harbor develop-

Department of Harbors and Watercraft—Continued

ment loans, launching facility grants, planning loans and special studies and investigations. The department's estimated costs for the support of the development program are approximately \$340,000, which finances 21 positions. The workload for this program is reflected in the local assistance section of the budget. There the department requests \$50,000 for project planning loans to local agencies, \$651,500 for six launching ramp grants, \$3,250,000 for two harbor construction and improvement projects and \$5 million for two federal-state assistance harbor projects to finance the non-revenue-producing features including breakwaters.

Last year in the analysis we pointed out the loan and grant programs had not reached the expenditure levels previously budgeted and again this year we discuss the problem in the analysis of the local assistance Item 287. In many instances, the department has not been able to spend its local assistance money as budgeted but has had to drop budgeted projects, revise up or down the amount of funding for an individual project or eventually reappropriate expenditures due to failure to spend money within the terms of the appropriation.

Most of the expenditure revisions result from budgeting projects before they are evaluated for either technical or economic feasibility. This is especially evident in the launching facilities grant program in which about two out of every three projects previously budgeted have had to be dropped altogether or revised significantly in later budgets. For those projects involving larger sums of money such as the harbor of refuge program, the expenditure of state funds depends on the availability of federal funds and the priority the federal government places on boating developments in relation to its other national and international responsibilities.

The fact that the department is able to budget for all requests that are received from local agencies indicates that the department has more money to spend than it currently needs. It further indicates that the department is not following the California Boating Plan for the development of boating facilities on the basis of highest priority need since it budgets all projects that come along.

The local assistance Item 288 requests appropriation of \$651,000 for grants to local agencies for six launching facilities. Not one of the projects has as yet been determined economically feasible by the department and in most cases there are serious questions as to technical feasibility. Also in budgeting these six projects, the department gives no indication that it has followed the recommendations contained in its California Boating Plan which cost the department \$110,000 to have prepared. All six launching facility projects are located in areas where the California Boating Plan indicates a present surplus of launching lanes; and furthermore, only three of the projects are located in areas where the boating plan indicates there may be a future deficiency of projects by 1975. The California Boating Plan states "... unless future development is better guided so as to relate more closely to the boaters' actual needs, surpluses in launching facilities may be created in three regions, ..." It appears that even though the department has 21 positions to work on development plans, it is compounding the

Department of Harbors and Watercraft—Continued

problems of boating facility deficiencies rather than helping to solve the problems.

It should be noted that there may be isolated areas of need within total planning regions of surplus. However, if these exceptions exist, the department should present evidence of need, which has not been done. Economic and technical feasibility of projects is not determined until after the projects are budgeted. We have been willing to overlook these deficiencies in planning because until recent years the department did not have to justify its projects for purposes of securing annual appropriations. We believe the department has had reasonable time to make this adjustment in its planning activities but it has not done so even though it possesses ample staff to do the planning.

Perhaps of even greater significance is the lack of indication that the department is continuing development of the California Boating Plan. The California Boating Plan was published in 1964. It provides guidelines for boating developments according to the boating needs of the state. The department should use and expand that document to develop a program that assists in the construction and development of boating facilities according to the highest priority needs. The department has ample and qualified staff in its boating facilities development section to carry out this task also.

Because of the continuing planning problems and slowness in developing the boating program, we recommend that the support budget for the Boating Development Program not be approved until the development section, utilizing the California Boating Plan as a base, presents to the Legislature the details of a planning approach which will develop a local assistance program based on highest priority needs. We also recommend that technical and economic feasibility of projects be determined prior to requesting appropriations of the Legislature.

Boating Safety and Control

The objective of the Boating Safety and Control program is to protect the lives and property of persons engaged in boating activities and encourage uniformity in boating laws. The elements of the program include regulation, registration and boating safety research and education. The Boating Safety and Control program is estimated to cost approximately \$680,000 annually at the present level and includes 49.5 currently authorized positions.

The department develops and recommends regulations on registration, equipment and operation of vessels which the Harbors and Watercraft Commission adopts. The department reviews and makes recommendations on local boating ordinances to encourage uniformity and encourages the development of a uniform state system of waterway markers. The department also licenses the operators of "for-hire" vessels which carry passengers and maintains a file of boating violators. During calendar year 1966, the department registered 37 operators of "for-hire" vessels and has a total of 282 operators currently registered.

Boat registration is the most expensive of all the operating programs of the department. The department processes various transactions for

Department of Harbors and Watercraft—Continued

registration including original registrations, renewals, transfers and the issuance of duplicates. As of December 31, 1966, the department had registered 333,195 vessels for calendar year 1966. This was a renewal registration year and registrations issued from January 1, 1966 will be valid until December 31, 1968. The department estimates, based on cumulative registration data, that there are 388,000 boats in California. This would indicate that 55,000 vessels have not been registered since January 1, 1966. However, there are indications that the department's estimate of total vessels registered is rather high since it is difficult to keep track of boats which have been taken from the state. Even assuming that the estimate is high, the department appears to be losing some revenue from lack of renewals.

During calendar 1966, the department had 426,519 registration transactions of all types including originals, renewals, transfers and duplicates. The largest workload was in renewals and in the 1965-66 budget, 7.1 temporary clerical positions were included to process the heavy workload of renewals.

To assist in the registration program the department has approximately 540 registration outlets throughout the state. For the most part these are dealers in boats and boating equipment and include auto clubs. These agents provide the service to the department without charge.

The department maintains a file of all registered boats and provides a 24-hour, 7-day week boat identification service for law enforcement and search and rescue agencies. This service has been averaging approximately 60 calls at night per month.

An act of the 1965 Legislature levied a sales tax on the sale of boats between individuals. The Board of Equalization has been reimbursing the department for its services in collecting the taxes. During the current year it is estimated \$78,495 will be reimbursed the department by the board from the General Fund for the services of 10.3 positions and the budget includes a reimbursement for the same amount in the budget year. After two years' experience with the program, there have been some simplifications in the way the transactions are handled and the number of authorized positions for the program may be reduced. As a consequence, the Board of Equalization will assume the major role in this program and four clerical positions will be transferred to that agency. Two other clerical positions will continue to be financed by the board with the work performed by the Department of Harbors and Watercraft. Four positions will be eliminated. The Department of Harbors and Watercraft will be reimbursed \$14,462 by the Board of Equalization from the General Fund and the Board of Equalization will expend \$26,604 for its efforts, reducing the total program cost to \$41,066, which realizes a savings to the General Fund of about \$40,000 from current program costs. In the analysis of the budget for the Board of Equalization, Item 109, we have recommended the reduction in the General Fund appropriation for this program which will automatically reduce the reimbursement to the Department of Harbors and Watercraft.

Department of Harbors and Watercraft—Continued

The Boating Safety, Research and Education activities are designed to reduce the number of boating accidents and promote safety on the state's waterways. It is difficult to measure the results of efforts in boating safety. Enforcement of boating regulations on the waterways of the state is largely a local responsibility. The division concentrates on education through various boating organizations of the state, the distribution of enormous amounts of safety leaflets and pamphlets, the collection of accident reports, some surveys of hazardous conditions on boating waters and dissemination of information through radio, TV and news releases. The following table indicates the boating accidents statistics as reported by the department for each of the past five calendar years.

California Boating Accidents Statistics

	1962	1963	1964	1965	1966
Number of accidents -----	401	505	554	444	540
Number of fatalities -----	89	84	91	109	88
Number of injuries -----	161	224	270	129	208

The printing costs for the Safety and Education section appear to be high and provide for considerably more material than is distributed in any one year according to the department's records. The budget includes printing 600,000 safety leaflets and posters costing about \$4,175. The department's records indicate that about 250,000 of these leaflets are distributed annually. The budget requests \$6,735 for 150,000 copies of the booklet on California boating law and \$2,500 for 15,000 copies of a compilation of various California boating laws. According to statistics issued by the department for the distribution of various publications, the safety leaflets are over-budgeted more than one-half and the boating law booklets are over-budgeted by one-third.

We recommend a \$5,000 reduction in the department's printing budget.

Departmental administrative costs are estimated at approximately \$100,000 in the budget year and are prorated to the two programs of the department. With the exception of six positions, the administrative services are provided by contract with the Department of Parks and Recreation to provide fiscal, personnel and general office services. The contract with the Department of Parks and Recreation is for \$50,000 in the budget year. The Attorney General provides legal services to the department and there are items in the professional and consulting services budget to cover this service. The budget does not include any new positions resulting from establishing the former division as a department.

DEPARTMENT OF PARKS AND RECREATION

ITEM 216 of the Budget Bill

Budget page 706

FOR SUPPORT OF DEPARTMENT OF PARKS AND RECREATION FROM THE GENERAL FUND

Amount requested in Budget Bill-----		\$14,872,538
Budget request before identified adjustments-----	\$15,436,049	
Increase to recognize full workload change-----	1,088,993	
Budget as adjusted for workload change-----	\$16,525,042	
Adjustment—undetailed reduction (10 percent)-----	1,652,504	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET___ \$840,607

BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING \$811,897

Summary of Recommended Reductions

	Amount	Budget	
		Page	Line
1. Delete funds for proposed survey crew-----	\$29,005	706	12
2. Delete funds for 11.5 positions at unacquired park units	82,657	708	24
3. Reduce amount of proposed staff at Alameda and Car-			
pinteria State Beaches-----	6,120	708	27
	5,500	708	28
	2,275	708	30
	5,050	708	31
4. Reduce water replenishment, Lake Elsinore-----	50,000	708	64
5. Reduce staff at Squaw Valley State Recreation Area-----	53,000	708	24
6. Delete funds for 32.6 field positions in park management			
requested for workload-----	345,000	706	12
7. Substitute present funding of 50 permanent positions			
with seasonal or permanent-intermittent positions-----	250,000	708	24
8. Delete professional and consulting services-----	12,000	709	57

GENERAL PROGRAM STATEMENT

The Department of Parks and Recreation plans, acquires, develops and operates state outdoor recreational areas and facilities and performs statewide recreation planning. The department includes the Division of Beaches and Parks and the Division of Recreation with service functions such as personnel and fiscal affairs performed by the Division of Administration. The department formerly included the Division of Small Craft Harbors, but effective October 6, 1966 and pursuant to Chapter 61, Statutes of 1966, the Division of Small Craft Harbors became the Department of Harbors and Watercraft. General policies for the administration of the two operating divisions are established by the State Park Commission and the Recreation Commission, all of whose members are appointed by the Governor. Statutory authority and responsibilities for the department appear in Divisions 5 and 7 of the Public Resources Code. The department has about 1,630 authorized positions.

Last year the Management Analysis unit prepared a reorganization plan for the department. The plan has considerable merit. The reorganization is badly needed to meet some of the growth problems of the department and to integrate the present efforts of the department more effectively. In particular the consolidation of the Park Commission and the Recreation Commission is urgent.

The department has budgeted programs for 1967-68 involving \$25,495,612 in appropriations as follows:

Item 216

Parks and Recreation

Department of Parks and Recreation—Continued

Item 216, support from the General Fund-----	\$14,872,538
Item 329, capital outlay for development of the state park system from the General Fund-----	\$1,000,000
Item 341, local assistance, grants to local projects from park bond funds-----	\$9,433,868
Item 342, administration of state grant money from bond funds-----	\$51,665
Item 343, project planning from bond funds-----	\$137,541

The above program is a marked reduction from the approximately \$95,000,000 budgeted for the 1966-67 fiscal year.

The Governor's Budget for the Department of Parks and Recreation requests net support expenditures of \$14,872,538 compared to estimated expenditures of \$15,197,952 for comparable activity in the current year, a decrease of \$325,414 or 2.1 percent. As the table below indicates, the department has had substantial increases in support expenditures over the past five years due largely to increased staffing requirements at newly acquired or newly developed units of the state park system.

The substantial amount of reimbursements shown in the table are mostly for the recreation contract services unit financed by the Department of Water Resources, administration and data processing services for the Department of Harbors and Watercraft and the reservoir development unit and approximately 10 positions at Angel Island funded from capital outlay.

Department of Parks and Recreation—Support Expenditures

Source of Funding	1963-64	1964-65	1965-66	1966-67*	1967-68*
General Fund----	\$10,994,389†	\$12,268,512†	\$14,848,793	\$15,197,952	\$14,872,538
Reimbursements----	677,935	930,053	1,399,567	1,595,933	1,599,075
Total					
Expenditures----	\$11,672,324	\$13,198,565	\$16,248,360	\$16,793,885	\$16,471,613

* Estimated. The General Fund amount for 1967-68 is the net amount after the 10 percent reduction.

† To insure comparability, includes service fees and concessions which were reimbursements prior to July 1, 1965.

The original support request in the Governor's Budget is \$15,436,045. To that figure has been added \$1,088,993 to recognize workload change. From the total of \$16,525,042 a 10-percent reduction of \$1,652,504 has been taken to arrive at the net appropriation of \$14,872,538 being requested. Most of the workload increase is in state park system management, with slight increases in project planning, administration of grants and general management.

For presentation and analysis, the department's support functions are divided into six programs as follows:

1. Statewide Recreation Planning
2. Park Planning and Development
3. Management of State Park System
4. Administration of Grants
5. Services to Other Agencies
6. General Management

Department of Parks and Recreation—Continued

ANALYSIS AND RECOMMENDATIONS

Statewide Recreation Planning

During the current year a statewide recreation planning unit of 15 positions was established in the director's office to provide a continuing analysis of recreation problems in California and recommendations for their solution. Estimated current year expenditures for the program are \$240,123. The unit is responsible for maintaining the California Recreation Plan, reviewing and making recommendations on plans and reports of other agencies, compiling data on recreation needs, developing methods of analyzing recreation data and participating in studies of statewide recreation problems and resources.

During the current year, the department prepared and published the Park and Recreation Information System which utilizes computers to evaluate the demand for outdoor recreation based on an inventory of existing or proposed recreation facilities and to project the future demand. The system is intended to provide a framework for development programs to meet the future outdoor recreation needs of the state. The department has also released a publication with information on the adequacy of the supply of outdoor recreation facilities through 1980 for the Los Angeles-Long Beach and the San Bernardino-Riverside-Ontario metropolitan areas.

In compliance with the California Parkway Act, Chapter 1626, Statutes of 1965, the department has reported to the Legislature its recommendations concerning potential parkway routes that might be established as part of the state parkway system. The study was performed by representatives from each of the six district headquarters of the Division of Beaches and Parks together with representatives of the Statewide Recreation Planning Unit. The State Park Commission has proposed that the potential parkways for the state parkway system should include the following highways:

Mulholland Drive, Los Angeles County
Avenue of the Giants, Humboldt County
Skyline Boulevard, San Mateo, Santa Cruz and Santa Clara Counties
Tahoe Parkway, El Dorado and Placer Counties

Public Law 89-72, the Federal Water Project Recreation Act, provides for nonfederal participation in the financing, operation and maintenance of recreation and fish and wildlife enhancement features at federal water projects. The planning unit studies and makes recommendations on the desirability of state participation at these water projects.

We believe that the statewide planning function should be rated as high priority work. California has pioneered in establishing recreation data collection analysis and program evaluation. We know of no other way to evaluate objectively the state's recreation needs, select priority projects, determine funding needs and integrate the state's several divergent recreation programs involving the state park system, state grants, federal grants and recreation in the State Water Project.

Department of Parks and Recreation—Continued
Park Planning and Development

The Park Planning and Development program includes the following elements:

- Park resources planning
- Preliminary project studies
- Project planning
- Capital outlay project planning
- Capital outlay project control

The program is estimated to cost approximately \$1,765,000 during the current year and finances about 160 positions.

The objective of park resources planning is to develop and maintain a plan for the state park system itself which will include an inventory of the park system areas and facilities, needed acquisitions, and planning for development of the park system for a period of 5 years and a more general plan for an additional 15 years. The department hopes to have the state park system plan approximately two-thirds completed during the budget year with completion scheduled for December of 1968.

The preliminary project studies include preliminary evaluation and recommendations on acquisition project proposals prior to making detailed project studies. There are approximately 150 projects on file at the present time awaiting preliminary studies. The annual average of requests for such studies is 50. Based on experience, about two weeks is required for one man to complete a study. At present most of the better projects have been studied for acquisition under the Bond Act and these preliminary studies could be curtailed.

The project planning activities include feasibility studies of projects proposed for addition to the state park system after a favorable preliminary project study has been completed, and the preparation of master plan drawings for all units of the state park system. More detailed planning is done to demonstrate feasibility and to recommend staging for acquisition and development. Here acquisition planning could also be curtailed. More important now than acquisition planning is the preparation of master plans for each of the units of the state park system. The department should emphasize preparing carefully detailed plans for each of its new or undeveloped units. These plans, which include land use plans, land and boundary plans, acquisition plans, general development plans, design analysis and developed area plans, follow acquisition but precede development. They are the heart of good development management of the new units of the park system.

The next sequence in the planning procedures involves capital outlay planning which is the preparation of budget requests for acquisition or development plans and outline specifications so that the Office of Architecture and Construction may prepare preliminary plans and specifications as needed for budget justification. The department prepares the construction plans and construction budget estimates for minor capital outlay projects under this program.

Department of Parks and Recreation—Continued

The capital outlay project planning and control activities insure that acquisition and development are carried out as intended. The control involves liaison with the Department of General Services and includes preliminary and working drawings review, inspections to see that construction projects are carried out according to plans and specifications and to insure that park resources are maintained during construction.

Within the past three years the workload of the overall Park Planning and Development Program has increased enormously. In fiscal year 1964-65 the Budget Act appropriation for the Department of Parks and Recreation was \$6,111,500 for development of existing units of the state park system. At that time, the project planning group had a substantial backlog of work in developing master plans for the park units.

The 1964 Recreation Bond Act placed upon the Planning and Development Program the responsibility for the expenditure of \$85 million in acquisitions of park land and \$20 million for minimum development of lands acquired under the Bond Act. With this added workload, the only additional staff provided the Planning and Development Program was 10 positions financed from the Bond Fund to carry out feasibility studies for acquisitions under the bond program, and when those studies were completed to perform assigned studies in acquisition and development.

Simultaneously with all the workload involved in the bond program came an accelerated development program for existing units of the state park system. The Budget Act appropriation for General Fund financing of park development increased to \$7,569,674 in 1965-66 and \$14,839,512 in 1966-67. Thus, the good intentions of providing funds for prompt acquisition of needed recreation areas and the development of existing park properties for the use of today's Californians resulted in appropriating money for a much greater program than the department has been able to perform. The Park Planning and Development Program has almost been overwhelmed.

In October, 1966 the department proposed to establish administratively 20 additional project positions for the purpose of meeting the increased workload in the Planning and Development program. The estimated cost of the additional staff was \$135,000. The department proposed to fund this addition of personnel by using monies which were budgeted to staff recreational facilities which had not been completed due to the delay in acquisition and construction. These 20 positions are probably a reasonable measure of the staffing shortage in the current year.

The budget year capital outlay program for the Division of Beaches and Parks as submitted to the Legislature has been practically eliminated. The budget requests \$1 million from the General Fund for unallocated purposes to provide "... for the essential planning, opportunity purchases, and development necessary to meet the minimal needs of the state park system for the 1967-68 fiscal year." The Budget Bill requires this money to be allocated by the Department of Finance. In

Department of Parks and Recreation—Continued

addition, \$137,541 from the Park Bond Fund is requested to continue the work of the ten positions financed for park project planning purposes. The budget also proposes to revert to the General Fund \$10,582,-104 under Sections 11 and 11.2 of the Budget Bill for numerous capital outlay appropriations of prior years for development of units of the State Park System.

At the time of preparing this analysis, the staffing needs for the Park Planning and Development Program in relation to the remaining workload are unclear. Also, it is not clear what workload the present staffing would be able to accomplish. We can only defer recommendations on the program until the administration's plans are more fully determined and the workload details can be analyzed.

There are three areas, however, concerning which we should comment. The first is the matter of the numerous plans that the department feels are necessary for feasibility studies which are then practically duplicated in master plans for the park units. This is clear from the repetitive nature of the planning work described in the paragraphs above.

The second area involves the standards of development for state park facilities. In the analysis of the 1965-66 Budget Bill, we discussed the need to establish a service fee policy based on the level of service provided in the developed park facilities and the cost of such facilities. In October of 1965 the director of the department assigned an employee in one of the district offices to draft a set of minimum development standards for picnic, camping, roadway, sanitary and other facilities needed in developing a state park.

The draft report was completed in February of 1966 but its status at the present time is uncertain. The report contains much good work and many recommendations to reduce costs for roads and sanitary facilities, which are among the most expensive elements of park development. In addition, there are suggestions on camp ground and picnic facilities development. With the competition for the General Fund dollar, the department could well use the report or modifications of it as a basis for standardizing facility developments keyed to the establishment of a policy for state park system user fees and as a means of controlling development costs. *Establishing such standards is so important that we recommend the Legislature direct the department to complete the good work which has been begun. We further recommend that no development funds except minimum development or immediate use funds be appropriated for presently undeveloped park units until the department has completed this critical task.*

Third, project planning is performed at Sacramento headquarters, at the three regional headquarters in Carmichael, Goleta and Monterey and by the reservoir development unit at a second location in Sacramento. In addition, each of the six district offices has a technical services staff of about four positions to assist park management within the districts ostensibly on maintenance and repair items. There probably is some project planning done by this staff also.

Most of the project planning is isolated from any park management personnel. Only at Goleta and Monterey are the planning and park

Department of Parks and Recreation—Continued

management personnel in the same building. The department's reorganization plan describes these difficulties well and offers solutions.

Included in the workload adjustment of \$1,088,993 for the department is \$29,005 to finance four engineering positions as a survey crew to provide topographic maps for the reservoir development unit. At the present time the maps are obtained from the Department of Water Resources on the scale that Water Resources uses for the development of the water project. The request for the survey crew would provide more detailed maps for the development of the recreation areas of the water project. The reservoir development unit is financed from capital outlay. The request for additional funds for a survey crew should also be from capital outlay, since the sole justification for the survey crew is the reservoir development unit activities. It is not clear why the Department of Water Resources' topographic maps are not suitable for recreation facility planning.

We recommend that irrespective of other pending recommendations on staffing needs, the \$29,005 for the survey crew be removed from the budget.

For all the reasons discussed above we can make no overall recommendation on the Park Planning and Development Program until the workload and staffing problems are resolved as nearly as is reasonably possible.

State Park System Management

The objective of the state park system management program is to provide outdoor recreation through the operation and protection of the facilities and resources in the state park system. The system includes almost 200 separate park units of which 175 are operated by the state. These units are scattered throughout the state with at least one unit located in almost every county. The total acreage in the state park system is almost 725,000 acres but over half of that is located in one unit, Anza-Borrego Desert State Park. The units of the state park system have been divided into seven classifications according to the purpose of the unit and include state parks, scenic or scientific reserves, historic units, state recreation areas, state beaches, wayside parks and riding and hiking trails. Attendance at the units of the system during fiscal year 1965-66 was almost 36 million. The revenue for that year from service fees and concessions was over \$3,900,000. The estimated costs of the management of the state park system program for the current year are \$14,400,000.

For management purposes, the state is divided into six operating field districts. Each of the districts is responsible for the general supervision of the units within the district and provides fiscal and clerical services to the field units and some technical assistance in maintenance, special studies and reports. The operations at each of the units includes direct information and orientation services to the public, the cleaning of grounds and facilities, periodic patrols for public safety, life guard services, boating patrol and management of the resources within the system including the protection of plant and wildlife and the preservation of historically valuable structures, sites and artifacts. Also included

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is the maintenance of ownership records and maps for management and planning purposes and reviewing land use applications concerning park areas. Finally, there is the maintenance of the facilities, buildings, grounds, roads and parking areas.

During the current year the state has acquired extensive property at Point Mugu. This was the number one priority project in the park acquisition program under the bond act and means a major unit has been added to the system in southern California to help meet the demands there for outdoor recreation. Point Mugu is located on the southern Ventura County coast and includes 6,438 acres with 2½ miles of ocean front. The budget includes some staffing and related expenses for the new unit.

During the budget year the Oroville and San Luis Reservoirs are scheduled to be available for recreation purposes. Some staff has already been assigned to these facilities and the budget in the workload adjustment includes additional staff for both locations authorized effective April 1, 1968.

The Governor's Budget as introduced to the Legislature includes funds for 5.8 additional positions to be assigned to four different park units with total salaries of \$31,270. The remainder of the budget is mostly an extension of the current year level with some increase for merit salary adjustment. We recommend that four reductions be made in the department's support expenditures for state park system management. These recommended reductions are:

1. 11.5 positions currently authorized at six park units but not needed because of delays in acquisitions or development, \$82,657.
2. 3.3 positions requested in the Governor's Budget, \$18,945.
3. Water replenishment, Lake Elsinore, \$50,000.
4. Reduce staff at Squaw Valley, \$53,000.

The first recommendation is for deletion of certain currently authorized positions. It is made on the basis of latest information from Property Acquisition Service of the Department of General Services or from the planning and control group in the Department of Parks and Recreation. At Delta Meadows, three positions can be deleted due to delays in acquisition of the project. The department is having problems getting access to the property for land surveys and no acquisition documents have been forwarded to the Property Acquisition Service as yet. The Whipple Mountain Project has two positions currently budgeted. This is another slow acquisition project involving mostly federal lands. Marin Headlands is a bond acquisition project, but the acquisition costs were underestimated and the Governor's Budget contains no additional funds for acquisition. Three authorized positions for Marin Headlands should be deleted from the budget unless the capital outlay budget is augmented. A position for Orestimba Wayside State Park has been authorized for some time. There have been problems with acquisition at the project and the Governor's Budget proposes to revert the capital outlay development moneys for the project. Mt. St. Helena is a major project remaining from the 1963 acquisition program. This project involves a

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condemnation suit which is on the court calendar for May 1967. We recommend that a position assigned for this project be funded for six months rather than for the full budget year. The department has estimated that two positions for San Luis Reservoir will not be needed until March of 1968 with nine months savings in salaries. *We recommend a reduction for these 11.1 positions costing \$69,227 in salaries and wages and \$13,430 in operating expenses for a total of \$82,675.*

The second reduction involves some of the 5.8 new positions in the Governor's Budget. The budget requests 2.3 positions for Alameda State Beach. The Division of Beaches and Parks is entering into an agreement with the East Bay Regional Park District to operate the unit, so the budgeted positions are not necessary. The budget includes funds for two additional positions at Carpinteria State Beach. The justification is that a new campground of 73 units will replace an old campground of 68 units creating additional workload for the staff. Carpinteria is a heavily used unit and amply justifies additional seasonal help on that basis. We would recommend that 12 man-months of seasonal aid be approved for the state beach there but would recommend the deletion of funds for one permanent position. *The salaries for these 3.3 positions at the two park units are \$18,945 and we recommend that the funds for these positions plus related expenses be deleted from the budget.*

Third, the budget requests \$100,000 for water replenishment at Lake Elsinore. Using funds appropriated for water replenishment in the current and prior years, the Division of Beaches and Parks has contracted for the installation of three wells at Lake Elsinore to pump water to replenish the lake. The division estimates that approximately \$50,000 is needed to operate the pumps during the budget year and requests an additional \$50,000 in case the division needs to buy water from an unknown source should a breakdown of pumps, or some other unforeseen circumstance occur. *We recommend that \$50,000 be appropriated to operate the pumps and that \$50,000 for the purchase of water replenishment be deleted from the budget.*

The fourth reduction involves Squaw Valley State Recreation Area. Senate Resolution No. 77, Statutes of 1966, directed the Department of Parks and Recreation to make a feasibility study of acquiring lands, concessions and contracts involved in the Squaw Valley State Recreation Area activities in compliance with the 1964 Recreation Bond Act. The department has responded to that directive and in addition has offered several alternatives for expansion and development of the area. The sole recommendation of the report, however, is that "... the state divest itself of its interest in the Squaw Valley area as soon as is practicable." We strongly concur. The recommendation is based on the conclusion that the state would not be able to offer outdoor recreation opportunities or facilities over and above those now provided and planned for future development by private enterprise.

The Division of Beaches and Parks has a staff of 30 permanent personnel and 3.7 seasonal positions at Squaw Valley. The total cost for the support of the park unit during the current year is estimated at

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\$418,757 with approximately \$104,000 in revenue from concession operations. The staff performs mostly maintenance and service functions and is responsible for the maintenance of state owned buildings, most of the fire protection service in the valley, water system, sewer services, the refrigeration plant of the Blyth Arena and the public parking area. If the state is to withdraw from the area as soon as is practicable, it should begin now and some reductions should be made in the staff at Squaw Valley. We recommend the following reductions in personnel:

- (1) Park ranger III
- (2) Park attendants (replace with 8 months of seasonal aid)
- (1) Painter I
- (1) Auto mechanic
- (1) Chief engineer
- (1) Snow safety specialist

At the present time there is a ranger IV and a ranger III to provide continuous supervision of the Squaw Valley State Recreation Area. We recommend that one of the supervisory positions, the ranger III position, be eliminated.

In plant operations at Squaw Valley, there are nine positions, including a chief engineer, a water and sewage plant supervisor, an electrician, three stationary engineers, one refrigeration engineman and two stationary firemen. We recommend that the position of chief engineer be eliminated.

In park maintenance there presently is a staff of seven including a ranger II, two park attendants, a carpenter, a painter, an automobile mechanic and a tractor operator-laborer. We suggest that the painter and the automobile mechanic positions should be eliminated.

For security and patrol there is a ranger I and three state park attendants. We suggest that two of the park attendants be replaced using eight months of seasonal park aid during the snow season.

The state finances a snow safety specialist while one of the concessioners operates the ski facilities and area. We suggest that funds for the snow safety specialist position be deleted.

We recommend that funds for these seven positions be deleted from the budget for a savings of approximately \$53,000 in salaries and wages in the operations at Squaw Valley State Recreation Area. In addition the department should be directed to eliminate all activities and reduce its responsibilities as fast as it legally can.

The state has a use permit from the U.S. Forest Service for about 1,100 acres of land at Squaw Valley. The department has been in the process of negotiating an exchange of lands with the Forest Service which includes securing fee title to this land. *We recommend that the state terminate immediately any negotiations to obtain state title to the 1,100 acres of U.S. Forest Service lands at Squaw Valley.*

In the 1966 Budget Act, the Legislature deleted funds for two firemen at Squaw Valley and the service district assumed the financing of these positions. *We recommend that the department expand the local*

Department of Parks and Recreation—Continued

service district coverage to the water system services and the sewage disposal system that the state provides for private interests at Squaw Valley. In addition, the state should dispose of the California and Nevada centers.

Of the workload adjustment of \$1,088,993 that appears in the department's budget, \$944,316 is applicable to the Management of State Park System Program and includes about 88 additional positions. From that amount, we suggest that reductions be made in staffing at units with slight prospects of acquisition during the budget year as well as for staffing at units where funds for development have been withdrawn or construction of facilities delayed.

In past years when there was doubt about the timing of acquisition for completion of development work, we have given the division the benefit of the doubt in allowing the funding for new staffing. This has been done on the basis that the Department of Finance would control any savings which might result.

This year because of the shortages of General Fund money, we have recommended removing the funds for staffing whenever there was doubt on the timing of acquisitions or construction completion. The shortage of General Fund money and the increasing delays in meeting construction schedules for the development work have required this change. It may be that occasionally a unit will be ready for staffing and no funds will be available. This is a hazard of stringent budgetary policy when events that cannot be precisely forecast are involved.

The park units and the staffing which can be reduced are as follows:

1. Año-Nuevo State Reserve. This is a bond acquisition project. The property descriptions have not yet been forwarded to Property Acquisition Service. There are 2.5 positions funded at \$8,190.

2. Red Bluff Diversion Dam. This project would involve a lease agreement with the Bureau of Reclamation for the state to operate the recreation area. The division has indicated it has elected not to enter into an agreement with the Bureau to operate the facility. There are 2.5 positions funded at \$14,418.

3. Gaviota State Beach and Refugio State Beach. These are state beaches in Santa Barbara County presently operated by the county. One of the approved projects in the bond acquisition program is the purchase of additional lands in the interior from Gaviota State Beach and additional beach frontage at Refugio. The ultimate development plans include state operation of the expanded units when the acquisitions are made. The current operating agreement between the state and county expires in April, 1969. The division has indicated to the county the state's desire to continue the present arrangement for county operation of the two units until the termination date of the present agreement. The budget requests funding of 10.6 positions for \$60,696 which can be eliminated to continue county operation.

4. Santa Monica Mountains. This is an acquisition project funded in the 1966 Budget Act. Acquisition is most unlikely during the budget year and three positions may be reduced for a savings of \$17,627.

Department of Parks and Recreation—Continued

5. Cima Dome. This is a desert acquisition project funded in the Budget Act of 1966 and involves following a slow federal procedure for acquiring federal lands. The budget includes one position for \$6,276 which may be eliminated from the workload adjustment.

6. Imperial Sands Hills. This is another desert project involving application to the Bureau of Land Management for federal lands. The budget includes one permanent position for \$6,276 which can be eliminated. Experience indicates this request is premature.

7. San Diego Old Town. This is an acquisition project funded by the Budget Act of 1966. Property acquisition information has not yet been forwarded to the Property Acquisition Service and acquisition during the budget year is most unlikely. The three positions funded at \$17,424 can be removed.

8. Whipple Mountains. This is an acquisition project funded by the Budget Act of 1966 and an additional position is included for the project on the basis of acquisition during the budget year. Experience has indicated this is unlikely. The funding of \$4,420 for the position may be removed.

9. Montgomery Woods State Reserve. The budget includes staffing of 2.5 positions to man the reserve with immediate public use facilities. The division has not constructed the facilities at the reserve and indications are that the funds for the construction of the facilities will be reverted. On that basis there is no need for the staff and funding of \$15,264.

10. Turlock Lake State Recreation Area. The state is taking over responsibility for enforcing boating safety regulations on the lake. The workload adjustment includes a ranger 1 position and 1.2 seasonal positions for park aid and lifeguards. There are already four permanent positions assigned to the recreation area and we recommend that the one permanent position be reduced from the workload adjustment and that the four permanent staff absorb the additional work that will be involved in patrolling the lake. The funding for the position to be removed is \$6,522.

11. McGrath State Beach. The budget includes four positions funded at \$23,508 to staff a second phase capital outlay project funded in the 1966 Budget Act for \$778,600. The budget proposes to revert the money for this project. These positions should be eliminated from the workload adjustment.

The total salaries and wages for the 32.6 positions enumerated above is \$174,203. Operating expense and equipment items for the positions are estimated at about \$170,000. We recommend that the workload adjustment made in the budget be reduced a total of \$345,000.

Based on field observations of operations of the various park units including trips over the years to a majority of the units of the state park system, we have concluded that some park units are staffed with an excessive number of permanent personnel and that some of these permanent positions can be replaced by seasonal positions. The salary and wages supplement for the budget year indicate that there are currently 1,196 authorized positions in field services of the Division of

Department of Parks and Recreation—Continued

Beaches and Parks costing \$7,804,352 in salaries and wages. About 70 percent (821) of these positions and 70 percent of the salaries and wages (\$5,936,669) are for permanent positions. About 30 percent (375) of the positions and 30 percent of the salaries and wages (\$1,867,683) are for seasonal help. We point out these facts to indicate that the field services for the state park system are staffed heavily in permanent positions. The record of monthly fees received from public use of the state park facilities in 1965-66 gives a sharp contrast.

Service Fee Revenue by Month, State Park System, 1965-66 Fiscal Year

July, 1965	\$651,634
August	703,818
September	323,035
October	173,210
November	87,810
December	57,532
January, 1966	79,085
February	96,257
March	142,910
April	276,761
May	295,826
June	477,645

\$3,365,523

The monthly record indicates that about 67 percent of the total service fees was collected during the four months of June to September, and about 82 percent of the fees was collected in the six months from April to September. An obvious measure of the staffing requirements and workload for the park system is the public use of the facilities.

We realize that another workload factor for field staffing is the repair and maintenance of park facilities. However, the division is finding that in recent years the park rangers who have been entering the system have not been the jack-of-all-trades variety able to repair and maintain many facilities. This is partially evident in the past requests of the division for financing a major deferred maintenance program requiring about \$3 million. There appears to be ample justification for the division to reestimate its field personnel and to utilize seasonal or permanent-intermittent help to a greater extent than is now the case.

Our review of the permanent staffing at the current units of the state park system indicates that the division could transfer 50 permanent employees, including positions of ranger II, ranger I and state park attendant to other park units. These 50 positions could be available for staffing of permanent positions at new units of the park system or where additional facilities are being constructed. We estimate \$10,000 annually as the cost of each of these 50 positions, including operating expenses and equipment, for a total amount of \$500,000. However, there would be the necessity to provide seasonal staffing at park units vacated by the 50 permanent personnel. This would require funding of approximately half the amount required for permanent positions. *We recommend that \$500,000 for permanent positions and related expenditures be reduced to \$250,000 for seasonal help, and that the department be*

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directed to begin immediately the necessary planning and recruitment to secure and train the needed temporary help. The department should also seek to expand this approach in the future.

The statement of revenues presented in the Governor's Budget for the Department of Parks and Recreation indicates that \$3,814,300, consisting mostly of service fees and concession revenues, was received in 1965-66. The budget estimates revenues in the current year of 1966-67 of almost \$300,000 more than was estimated when the 1966-67 budget was prepared last year. Also the budget indicates an approximately 50 percent increase in service fees above past experience levels by showing revenues to the General Fund of \$6,650,300 in the budget year. The budget presents no details as to how this will be accomplished. The department will have a difficult time reaching the budgeted level of revenue from service fees. For example, presently, 28 percent of the service fee revenue comes from Hearst State Historical Monument, and that unit is operating at almost full capacity.

In our analysis of the 1965-1966 Budget Bill, we recommended that the department review its fee structure to relate park system fees and the costs of the facilities furnished the users. We indicated that more revenues are needed than are being derived from the present system.

In January, 1966 the department director appointed a task force to investigate the park system fees. That group has submitted an interim report. The apparent goal of the task force was to secure service fees of approximately 50 percent of the direct operating costs for the state park system as suggested by the State Park Commission. No basis is presented in the report to explain why the fee system should return 50 percent of the operating costs rather than 60 percent or 20 percent or some other percentage. The report indicates that approximately \$1,900,000 in additional revenue is needed to meet the 50 percent goal as recommended by the commission. However, the report indicates that the suggestions of the task force, if applied to the fee system, would only increase revenues by \$536,000 annually. Most of the \$536,000 additional revenue would come from increasing the day use charges from \$.50 to \$.75 per vehicle parked. The task force did not make any recommendations to relate the costs of the facilities provided the public to the service fees charged.

Administration of Grants

The administration of grant funds under the Recreation Bond Act of 1964 and the Federal Land and Water Conservation Fund Act has been assigned to the staff in the Division of Recreation. The State Recreation Bond Act allocates \$40 million for grants to counties and cities for local and regional park projects. The Federal Land and Water Conservation Fund makes available annually approximately \$4 million to the state of California for allocation to various local and state recreation agencies. Through the budget year, the division will be involved in administering grants of \$27,757,842 appropriated to date by the Legislature under the Bond Act. The budget proposes additional grants of state bond funds for 55 different projects in 1967-68.

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During the current year the division will be administering \$4,066,045 in federal grant funds to local agencies under the Land and Water Conservation Fund. The budget does not indicate how the Land and Water Conservation funds will be allocated during the budget year. There was extensive discussion of the problems involved in those allocations included in our analysis last year.

The estimated cost for the Administration of Grants program during the current year is approximately \$171,000. With \$96,000 reimbursed from the Land and Water Conservation Fund and the Bond Act Fund, approximately \$75,000 is charged to General Fund expenditure. These General Fund expenditures are for the support of the Recreation Commission and a secretary, the Chief of the Division of Recreation, and one recreation planner. There may be some savings if the State Park Commission and the Recreation Commission are merged and the statutory divisions within the Department of Parks and Recreation are abolished, as proposed in the department's reorganization plan.

Services to Other Agencies

The Department of Parks and Recreation provides administrative and data processing services for the Department of Harbors and Watercraft. In the budget year, these costs will consist of \$50,000 for such administrative matters as personnel and fiscal services and \$85,379 for data processing services. Also, the department provides archaeological investigation services to other state agencies on a reimbursement basis through contractual agreement. Most of these investigations are for the Department of Water Resources and the Division of Highways and amount to about \$90,000 annually.

General Management

The General Management functions of the Department of Parks and Recreation include administrative services of personnel and training, management analysis, budgeting, accounting, internal auditing and service and supply. The costs for these functions are prorated to the department on the basis of direct costs. The total costs for the General Management program in the current year are estimated at \$980,580.

The workload adjustment for the Division of Administration includes \$105,484 covering 14.3 positions for salaries and wages, operating expense and equipment. Most of the positions are clerical with some additional workload in data processing and additional account clerks, typists and some temporary help. In addition, there is a workload request for a junior counsel and student legal assistant. The budget includes \$12,000 at the present time under professional services for the Division of Recreation to pay for legal services involved in administering contracts related to the grant portion of the Recreation Bond Act and the grants under the Land and Water Conservation Fund. That money has been utilized to provide some assistance to the department's existing counsel. If these positions are included in the workload adjustment, there should be a corresponding reduction of \$12,000 for legal services in the professional services expense of the Division of Recreation.

We recommend professional and consulting services of \$12,000 be deleted from the budget for the Division of Recreation.

DEPARTMENT OF WATER RESOURCES

ITEM 217 of the Budget Bill

Budget page 712

FOR SUPPORT OF THE DEPARTMENT OF WATER
RESOURCES FROM THE GENERAL FUND

Amount requested in Budget Bill		\$10,518,330
Budget request before identified adjustments	\$11,515,454	
Increase to recognize full workload change	123,339	
Budget as adjusted for workload change	\$11,638,793	
Adjustment—undetailed reduction (10 percent)	1,163,879	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET--- \$1,647,804

RECOMMENDED REDUCTION FROM APPROPRIATION
REQUEST----- \$483,925

Summary of Recommended Reductions

	Amount	Budget Page	Line
Delete Quality and Use of Waste Water	\$151,000	729	23
Delete Water Quality Investigations	205,075	729	41
Delete Sub-surface Geologic Data	15,000	729	77
Transfer Cooperative Watershed Management Research	126,000	729	39
Reduce Planned Utilization of Ground Water Basins	40,000	729	56
Delete West Side Crop Adaptability Study	55,000	729	47
Reduce Western States Water Planning	40,000	729	58
Eliminate Advanced Techniques for Water Resources Development	83,829	729	79
Reduce Land Use and Classification Survey	105,000	729	76
Delete Unit Water Use—Vegetative	179,450	729	45
Delete Unit Water Use—Municipal and Industrial	65,450	729	46
Reduce Demand Studies, Coordinated Statewide Planning	90,000	729	75
Reduce Upper Sacramento River Investigation	40,000	729	69
Reduce Delta Off Stream Storage Investigation	40,000	729	60
Reduce Public Water District Activities	90,000	740	19
Reduce Recreation, Fish and Wildlife Post Land Acquisition	148,000	740	43
Reduce Sacramento River Flood Control Maintenance	40,000	748	71
Reduce River Forecasting and Flood Hydrology	108,000	748	78
Reduce Watermaster Service	26,000	749	12

Needed Administrative Revisions

Transfer Westside Conveyance System work to Coordinated Statewide Planning	
Transfer certain earthquake and geologic hazards work to Division of Mines and Geology	
Reduce General Management and Other Overhead:	
Eliminate San Francisco District	\$104,000
Reduce organization accounting	30,000
Consolidate program control and budget offices	50,000
Consolidate district program control and administrative offices	40,000
Eliminate General Staff	370,000
Reduce Graphic Services	130,000
Request Auditor General to continue to review accounting system im- provements and to report to the Legislature.	
Establish more business-oriented approach to project operations.	
Reduce miscellaneous overhead positions.	
Amend Water Code Section 11590.	

GENERAL PROGRAM STATEMENT

The Department of Water Resources is responsible for the planning, design, construction and operation of the State Water Project. It also

Department of Water Resources—Continued

carries on an extensive water resources planning and investigation program, collects data pertaining to water resources development and use, administers a variety of statutory functions related to water and allocates local assistance funds for flood control, watershed protection and beach erosion control.

The department continues substantially the same programs as in past years. Many of the programs are budgeted at much higher levels for next fiscal year, however, because of the increasing tempo in construction of the State Water Project. Comparative expenditures are shown below:

<i>Source of funding</i>	Department of Water Resources—Total Expenditures				
	1963-64	1964-65	1965-66	1966-67†	1967-68†
Burns-Porter Act, State Water Project	----\$140,562,256	\$166,427,719	\$269,657,430	\$329,596,661	\$369,068,568
General Fund support	-----9,839,257	10,454,512	10,902,565	11,386,914	11,638,793*
	\$150,401,513	\$176,973,231	\$280,559,995	\$340,983,575	\$380,707,361

* Workload budget.

† Estimated.

An increase to recognize full workload of \$123,339 has been added to the original support request in the Governor's Budget to give the full workload budget of \$11,638,793. A 10 percent reduction amounting to \$1,163,879 has been taken to arrive at the net appropriation of \$10,518,330 being requested. The \$123,339 workload increase goes to Federal-State Cooperative Mapping, Advanced Techniques for Water Resources Development and Mobile Equipment Purchases.

The Budget Bill shows a reduction of \$868,584 in the net support appropriation request compared to the current year. A total of 59 new positions were budgeted for support and capital outlay prior to the 10 percent reduction in the support budget. The department proposes to abolish 535 positions next year and to establish 649 new ones. This major adjustment reflects the curtailment of design and right-of-way functions and approaching completion of construction at Oroville and at the Delta Pumping Plant. The new positions are primarily in operations and maintenance or for construction in the southern San Joaquin Valley, the Tehachapi Mountains and the West Branch.

The funding for the department's fiscal year 1967-68 budget is similar to previous years. The General Fund supports all collection of basic data, various long-range investigations and gathering of information, project planning not related to the State Water Project, flood control operations and maintenance, and certain statutory and regulatory functions. The California Water Fund finances most Davis-Grunsky Act loans and grants. Water bond proceeds from the Water Resources Development Bond Fund finance the right-of-way acquisition, design, construction and other costs of the State Water Project. The revenue account of the Water Resources Development Bond Fund finances the operation and maintenance of completed portions of the State Water Project after they go into operation. Deficiencies in cur-

Department of Water Resources—Continued

rent revenues to meet the interest payments on outstanding water bonds are financed from federal flood control contributions which are placed in the Central Valley Water Project Construction Fund for that purpose.

Fund Condition Statements

The three statements of fund condition for water project construction shown starting on page 335 in the Capital Outlay portion of the Governor's Budget have been revised this year to agree with the records of the Controller. These revisions and adjustments are so complex and obtuse that they are understood only by the personnel preparing the fund condition statements. Unfortunately, this means that the statements have lost their value to the average reader and because of the obstacles to be overcome in understanding them, possess little value for management purposes.

Changing the statement of fund condition for the Water Resources Development Bond Fund and related funds and the further development of the utility accounting system have produced difficulties which can be illustrated by three examples. First, the fund balance as of June 30 in the fiscal year 1965-66 column shows a reduction of \$45,000,000 in the Water Resources Development Bond Fund compared to the current year. This is no change in the expendable resources in the fund but only a write-off of interest and depreciation which had been charged in previous years.

Second, the current and budget year columns show a fund balance of more than \$93,000,000 in the Water Resources Development Bond Fund when in fact there will be no expendable resources in the fund. The \$93,000,000 is the "equity" the General Fund has in the State Water Project due to General Fund appropriations to construct the project prior to approval of the Burns-Porter Act in 1960. The fund balance shown does not exist as an expendable asset in the Water Resources Development Bond Fund although this is the impression the fund condition statement gives.

Third, this same \$93,000,000 will decrease over the years as it is written off to repay the California Water Fund for the grants made to local projects under the Davis-Grunsky Program. As a result, this General Fund equity will eventually be transferred by this means to the California Water Fund. It might eventually find its way into priority four revenues (Water Code Section 12937(b)(4)) where it will be available to construct additions to the Water Resources Development System. While this appears only as a series of fund transactions, it may have major significance in practical terms because as the money is transferred into the California Water Fund in future years, it automatically becomes subject to Budget Bill appropriation for other state purposes (Water Code Section 12938). This point is noted here because the technical problems of accounting may be leading to obscure transactions and entries which in the long run may be inconsistent with the approach the Legislature had in mind. Since in many instances the Legislature did not consider these matters we cannot be certain that the developing circumstances reflect legislative intent.

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Water Bond Issues

The statements of fund condition are of greater importance this year than in previous years also because the water program is increasingly monopolizing the state's bonding capacity. The report of Dillon, Read and Co., Inc., of October 26, 1960, on which the financial feasibility of the State Water Project was predicated, contemplated a bond expenditure program not exceeding \$120,000,000 per year. For a variety of reasons, this goal was not achieved and the state is presently marketing water bonds at the approximate rate of \$300,000,000 per year. This high rate of issue to date is not known to have had any appreciable adverse effect on the bond market; in fact, the state has received quite favorable interest rates on the water bonds marketed so far. How long this can continue is another matter.

The table above shows water project expenditures during the current year of \$330,000,000 and \$370,000,000 next year. However, the five-year projection of capital outlay costs on page 334 of the Governor's Capital Outlay Budget shows an equivalent expenditure peaking at \$505,000,000 in the 1968-69 fiscal year and \$380,000,000 in 1969-70 when the peak of project expenditures begins to decline to lower levels.

Although the peak expenditure of \$505,000,000 is not all water bond proceeds and some of the scheduled work may not be undertaken, it still is clear that management of the state's fiscal resources requires prudent consideration of the expenditure of water bond proceeds. Furthermore, the state has signed an interim contract for the sale of Oroville power generation which will run until April 1969. While a long-term contract may be executed considerably before that date, there is no certainty that it will be. Therefore the diversity in the pattern of marketing bonds which the revenue bonds provided could conceivably not be available to the state until the peaking of project expenditures had already disturbed the bond market. Already the Governor's Budget shows the sale of Oroville revenue bonds delayed from the current year to the budget year.

Finally certain tidelands oil revenues which are now being devoted to state higher education institution programs have diminished rapidly and may not recover during the peak period of water bond sales. This may result in a continuing high level of other state general obligation bonds.

Although no significant problems have occurred to date, the sale of water bonds in the future may increasingly intrude on the sale of other general obligation bonds of the state. To the extent that this occurs, and its extent cannot be determined at this time, the effect will be either higher interest rates for all state bonds, whether water bonds or school bonds, greater financing of other programs from increased taxes, or the curtailment of expenditures in either the water program or other programs. It is clear therefore that the magnitude of water bond sales has increased to the point that it is a controlling factor in the sale of state general obligation bonds and it may also affect local bond issues.

At the same time that the water program is approaching its peak in bond sales, additional heavy sales of bonds from the \$792,000,000 issue for the Bay Area Rapid Transit System will be occurring and the Met-

Department of Water Resources—Continued

ropolitan Water District of Southern California will be selling major portions of its recently authorized general obligation bond issue of \$850,000,000 to construct facilities to handle state project water when it arrives in southern California. Presumably other issues of state and local general obligation bonds will continue somewhat as in the past.

For various reasons of which the most important is the lack of assessed valuation, local water districts in the San Joaquin Valley are already having difficulty in marketing their bonds to construct distribution facilities for state water. The Lost Hills Water Storage District had to pay 7 percent interest on its recent general obligation bond issue and the Belridge Water District paid 6.2 percent. The Berenda-Mesa District received no bids in spite of the fact that its bonds had been approved by the Districts Securities Commission.

The state has only limited latitude in scheduling the sale of water bonds. An investment of approximately \$800 million has already been made in the State Water Project. The necessary additional funds must be provided to complete construction of the facilities to the point that significant water sales revenues are secured. In addition, approximately \$600 to \$700 million in construction contracts have been awarded for which the state must have the funds on hand to make the construction progress payments due each contractor under the terms of his contract.

The problems of marketing large amounts of water bonds have already influenced the project's fiscal affairs. Last fall the sale of water bonds was delayed during October and early November. As a result, the department expended the funds available in the California Water Fund to meet water project construction progress payments. To compensate for this action, it will now be necessary to use water bond proceeds to cover Davis-Grunsky Act grants. This upsets the orderly pattern of financing under which water bond proceeds were not to be used for grants because there is no return of grant funds to pay principal and interest on water bonds so expended. While this is not a significant problem in the long run, it demonstrates that orderly financing according to administratively established policies is subject to revision under the pressures of the moment.

In view of the above considerations, the water bond expenditures need to be reduced to the minimum essential. For example, as long as the department is unable to market the Oroville revenue bonds which are presently authorized, there is no basis to continue to expend water bond proceeds which commit the state to the construction of a nuclear power plant when the construction of that plant can only be financed by additional revenue bonds. (In the alternative, the financing of a nuclear power plant with water bonds will leave insufficient funds to complete the water delivery features of the project.)

Although the Legislature does not appropriate the construction and operation funds for the State Water Project and we do not analyze that portion of the budget, we have included comments in our analysis of the Department of Water Resources' support budget when we have noted related construction expenditures proposed which appear to be unnecessary, excessive or which can be deferred without substantial

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detriment. We have done this because of the impact of water project financing on other state funding as outlined above.

ANALYSIS AND RECOMMENDATIONS

The fiscal year 1967-68 budget of the Department of Water Resources is presented on a program basis. The traditional organizational budget is not printed in the Governor's Budget this year as it has been in the past. Instead, we have requested and received supplemental justification material which we presently believe will provide the necessary detailed information for complete analysis of the department's budget even though the organization budget is not available. Depending on the experience with this supplemental material, it may be found appropriate to revise the request for supplemental material in future years.

Item 217 is included in the Budget Bill on a program basis and as in past years our analysis of the department's budget is presented on a program basis.

Water Development Planning

The Water Development Planning category generally includes the long- and short-range planning activities of the department plus the data collection and evaluation activities. It is budgeted at \$9,017,172 next year which is an increase of \$101,000 over the current year. In the budget year the General Fund finances \$6,705,582 of the above costs while water project funds finance the remaining \$2,311,590. The General Fund portion decreases slightly while the project funding increases approximately \$120,000 compared to the current year.

Special note must be made this year that as a result of recent changes in the department's program format and changes within the individual programs themselves, the definition of terms previously agreed on between this office and the department to describe the nature, extent of detail and contents of planning investigations has become useless. For a variety of reasons, it has become impossible to determine readily what is included in various investigations. Foremost of the current difficulties is the so-called implementation work on the San Joaquin Valley Master Drain and similar work on the Peripheral Canal. Under the implementation title the department has actually started preliminary design work in these two instances without having its budget show any expenditure specifically designated for design. In addition, this has also permitted moving some preliminary design into the district offices without having the full effect of this change become apparent in the budget.

Several years ago, the department began using the term advanced planning to describe the work needed to replan projects for which feasibility planning had previously been completed but which had to be done over. However, this feasibility replanning was charged to water project funds rather than the General Fund. More recently after the Upper Eel River Project had been authorized for construction, the upper Eel River investigation was started at what is normally a feasibility level but the department is now charging these planning costs to the project. Previously these would have been General Fund costs. This, in turn, has resulted in disagreement and controversy between the de-

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partment and the water service contractors on whether these charges are proper to make to the project.

In another situation, current experience with the Coordinated Statewide Planning Program indicates that certain aspects of this planning work are becoming similar to what was in the past classified as reconnaissance level planning investigation. However, at least three planning investigations are being budgeted in the district offices to study the same or similar type problems as Coordinated Statewide Planning. We have been unable to determine just what the nature of some of this district office work actually is and how it relates to Coordinated Statewide Planning. In specific later recommendations we have proposed that this district work be reduced and transferred to Coordinated Statewide Planning.

So much confusion has developed that it has become very difficult to discuss these various planning investigations and to know what level of work is being budgeted for each. The distortions and probabilities of inequitable funding have reached such proportions that corrective action is required not only to determine that the work is being properly budgeted but also to permit the Legislature to know what the department is doing.

The Water Development Planning category includes several programs of reasonably high priority. Among these is the continuing activity of basic data collection. If this data is to achieve its maximum value over the long run, it must be collected on a continuing basis because the historical continuity of the data on streamflows, ground water levels, etc., rapidly loses value unless it is available over a sufficiently long period of time to cover recordable, meaningful changes.

Many of the data collection activities and other programs in this section of the budget are joint undertakings with the federal government. Other investigations involve new problem areas or work which the state has already established as having a high priority. This does not mean that under the 10 percent reduction which the administration has directed the Department of Water Resources to make in its support programs, reductions to reflect improved economy or efficiency which can be identified by departmental line management cannot be made in these higher priority programs. The following recommendations are based on program evaluation and are intended primarily to identify low priority programs rather than to increase administrative efficiency.

Quality and Use of Waste Water

The program entitled Quality and Use of Waste Water is budgeted at \$151,000 for next fiscal year which is a slight increase over the current year. This program covers a variety of miscellaneous water quality activities, the most important of which are the sampling of waste water discharges and analysis of such discharges in order to determine the suitability of waste water for reuse.

The sampling of waste discharges in locations where there is presently no serious prospect of local reuse of the waste water is not productive. In particular, this is true of the northern California areas where interest in waste water reclamation is not high.

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The sampling of waste discharges is one of the areas of water quality sampling in which there is substantial duplication among the activities of the Department of Water Resources, the regional water quality control boards, the waste dischargers themselves and the State Department of Public Health. Two years ago the Resources Agency Administrator assured the Legislature that a comprehensive Resources Agency effort would be made to eliminate duplication in all water quality sampling but that this effort was dependent on consolidation of the Resources Agency in the new Resources Building and computer processing of water quality data.

The Assembly Interim Committee on Water, in its report Volume 25, Number 11, Page 30, requested the Resources Agency Administrator, the Department of Finance and the Legislative Analyst to check future developments to assure that an integrated system of data collection and analysis was satisfactorily completed. The report also requested a brief memorandum every six months on progress.

To date, we are unaware of any progress which has been made in the coordinating handling of water quality data. Furthermore, discussions with the computer staff of the Department of Water Resources have indicated that it will be necessary to establish administrative policies and a program for identification of duplicate data before the data can be processed for comparative purposes on a computer. Therefore, it is concluded that the original approach to the coordinated handling of water quality data proposed by the Resources Agency Administrator was not feasible. No substitute efforts have been made to secure greater coordination in the handling of water quality sampling and analysis. The result is no discernable progress in the last two years.

In view of the fact that the program entitled Quality and Use of Waste Water appears to be one of the principal areas where duplication of effort occurs and that the regional water quality control boards have the authority to monitor these discharges as well as to require self-monitoring by the dischargers involved, and in view of the insignificant results achieved by the Department of Water Resources in stimulating further use of waste waters in California to date, it is recommended that the program be deleted from the budget for a General Fund saving of \$151,000.

Water Quality Investigations

The Water Quality Investigations program is budgeted at \$205,075 next fiscal year. It finances a variety of reports and investigations into water quality problems of the surface and ground waters of the state. Recently investigations were made in the San Lorenzo River watershed, the Fresno-Clovis area and in the Russian River watershed. Apparently no major problems were found but the department nevertheless prepared and published a detailed report on each area. A recent report on Clear Lake was relatively more useful.

Substantial amounts of the money in this program are expended to solve or investigate water quality problems in areas which should be the responsibility of local government. More importantly, this work is a more detailed investigation of the type now being undertaken by

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the regional water quality control boards in establishing regional water quality policy pursuant to recent state and federal legislation. However, because the regional boards have statutory authority to establish policy for the protection of the waters of the state, their policy reports contain definite conclusions on the quality of water which is to be maintained and a program for establishing or upgrading waste discharges in order to maintain that specified water quality. Therefore, the regional boards are at present performing somewhat similar functions under their regulatory authority as the Department of Water Resources is performing in its water quality investigations. The important difference is that the regional boards have the authority to follow up their investigations with regulatory action while the department merely files a data report including ineffective conclusions and recommendations.

The increasing importance and emphasis on water quality matters in California cannot be overlooked. Last year the Legislature provided substantial additional funding for the state and regional boards to establish water quality policy as required by new state and federal legislation. As a result, the regional water quality control boards have both the authority and funding to continue California's progress and leadership in water quality activities. The result of eliminating both the program entitled Quality and Use of Waste Water and the program entitled Water Quality Investigations, when considered in conjunction with the augmentations of the budgets of the state and regional boards last session, is to transfer the funding for this work from the department to the state and regional boards. It would be appropriate therefore, if the department's personnel working on these two programs could be transferred to any of the 12 vacant positions on the state or regional board staffs. It should be noted that the department will still retain in its budget \$50,000 to make investigations for the regional boards, \$60,000 for waste water reclamation project studies, \$251,000 to provide advice to regional water quality control boards on waste discharge requirements plus its large surface and ground water quality monitoring programs.

It is recommended that the Water Quality Investigation program of the Department of Water Resources be deleted for a General Fund saving of \$205,075.

Subsurface Geologic Data

Two years ago the department began a small program to identify, clarify and catalog the data in its possession and elsewhere pertaining to the water-oriented geology of the state. Several district offices of the department have cataloged their information to date. This activity may be desirable and may contribute to the increased efficiency of the department in the long run but it is not an urgent or timely undertaking. Rather, it is illustrative of work which can be deferred until such time as the state may have additional funding available.

It is recommended that the program entitled Subsurface Geologic Data be deferred for at least the 1967-68 fiscal year for a General Fund reduction of \$15,000.

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Cooperative Watershed Management Research

For approximately 10 years the Department of Water Resources has been financing the state's portion of a cooperative research program involving the University of California and the U.S. Forest Service. This program is seeking to discover methods for increasing water yield by management of timber lands, grasslands and brushlands.

The primary interest of the Department of Water Resources lies in the increased yield of the watershed downstream where projects to conserve and transport the yield may be located. The department is also interested in the adverse effects of sedimentation on downstream reservoirs and in the prevention of rapid runoff and flooding.

The Department of Conservation is interested in the management of the watershed and the grass and brushlands themselves rather than in the downstream effects. While both agencies have interests in the work, the more direct interest lies in the Department of Conservation because of its direct interest in the watersheds themselves and because of certain regulatory powers it has affecting these watersheds.

The Watershed Management Program needs to be evaluated in terms of its accomplishments leading towards better watershed management. It is recommended that the program be transferred to the Department of Conservation by reducing item 217 in the amount of \$126,000. As an appropriate responsibility for that department, it should be evaluated by that department against its other research work and related activities. If the Department of Conservation finds this program to have value and to be worthy of continuation, it should be absorbed in Conservation's budget.

Planned Utilization of Ground Water Basins

For several years the department has been conducting highly sophisticated investigations of the optimum utilization and most economic management of ground water basins in southern California and in the San Francisco Bay area. During the hearings on the budget last year, several augmentations to this program were proposed by local water agencies in basins presently being studied by the department. The Legislature provided some augmentation for these investigations and explored the possibility of increased local participation in the conduct and financing of these investigations.

The 1967-68 budget provides for significant participation by the local water agencies in each of the studies in southern California. This cooperation has been formalized in written operating agreements covering staffing, financing the use of computers, furnishing office space, collecting and analyzing data, as well as assisting in the modeling of the ground water basins and the definition of management alternatives to be evaluated by the investigations. The general result has been beneficial in that the state has been relieved of part of the burden of financing these studies while the studies themselves have been made more realistic and of greater value by the active interest and participation of the local water agencies which will have to manage the ground water basins when the studies are completed. In addition, the

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local participation clearly demonstrates local interest and support for the investigation.

In the San Francisco Bay area the planned utilization of ground water basins investigation is presently studying three basins, the Santa Clara River basin, the Niles Cone and the Livermore Valley. Santa Clara County is participating in the Santa Clara Valley investigation in a manner roughly equivalent to the pattern of local participation in southern California. However, this pattern of local participation has not yet extended to the Niles Cone and the Livermore Valley investigations. In order to provide equal treatment for the local water agencies in all of these ground water basin investigations and to assure the participation, interest and support of the local water agencies in the investigation, there should be equivalent participation by local agencies in the Niles Cone and Livermore Valley investigations.

It is recommended that the \$170,000 budget for planned utilization of ground water basin investigations in the San Francisco Bay area be reduced by \$20,000 each for the Niles Cone and Livermore Valley studies in order to secure local participation in the projects. This recommendation will result in a General Fund saving of \$40,000 to the state.

West Side Crop Adaptability Study

The West Side Crop Adaptability Study is a study financed by the department and executed by the University of California at a budget cost of \$55,000 for next fiscal year. The objective of the study is to develop new and highly refined data to permit evaluating the suitability of the western portion of the San Joaquin Valley for introduction of various crops when water becomes available.

The West Side Crop Adaptability Study was eliminated by the Department of Water Resources from its budget last year on the basis of low priority but was reinstated by the Legislature. The study has been conducted for many years. The primary beneficiaries of the study are the landowners who will be advised as a result of the studies what crops are best suited for their land when it receives water. Most of the study benefits will be received by local property owners and to that extent it deals with local agricultural practices rather than water resources problems. It appears to be a low priority program and not entirely appropriate for financing by the Department of Water Resources if it should be continued.

It is recommended that the West Side Crop Adaptability Study be deleted from the budget for a General Fund savings of \$55,000.

Western States Water Planning

The Western States Water Planning Program is presently in its second year of operation. This program finances the department's participation as the principal state agency involved in seeking understanding and solution to the water planning and supply problems of mutual interest to the 11 western states of the United States whose Governors have organized the Western States Water Council.

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The other major work under this program is the negotiation of differences among the states concerning the construction of projects on the Colorado River System and the proposed importation of major supplies of water from the Pacific northwest to the arid Pacific southwest. Closely related to this activity is the state and federal planning of water resources projects in California's north coastal area since these projects may serve as alternative supplies to importation from the Pacific northwest.

This program has been funded during the current year at a level of \$200,000. An increase to \$205,923 is requested for next fiscal year. During the current year, a \$25,000 contract has been executed for a study by the University of California in coordination with other universities of the western states to indicate the economic benefits to be derived by the western states from increased supplies of water. Included in the budget request for next fiscal year is \$42,000 for additional contract work which, to date, has not been identified. The justification for California to finance outside studies of problems beneficial to the 11 western states is not clear. These studies should be financed jointly by the Eleven Western States Water Council since this is one of the primary purposes of the council.

It is recommended that the Western States Water Planning Program be reduced by \$42,000 in order to eliminate the contract work and that an appropriation of \$163,923 be approved for this program.

Advanced Techniques for Water Resources Development

Last year this analysis called the Legislature's attention to the program entitled Advance Techniques for Water Resources Development which is funded jointly from Water Project and General Fund money for the current year. The budget for next fiscal year continues the program at a General Fund expenditure level of \$83,829 and eliminates water project financing, presumably on the basis that project-oriented work has been completed and because of objections by water service contractors to project financing of this work.

Although we recommended deletion of the program in our analysis last year partly on the basis that it was not essential work, we also pointed out that some significant benefits could arise from the work. A favorable factor in our review last year was the unusual qualifications of the individual who was supervising this work which indicated a prospect of significant accomplishment in integrating theoretical and practical approaches. This individual has now left the department and the future prospects of this program are not certain. In addition, the scope of the project has been revised for next fiscal year so that the program is more than ever becoming difficult to differentiate from the activities being conducted in the planning and operations program of the department.

It is recommended that the amount of \$83,829 for the Advanced Techniques for Water Resources Development be removed from the budget. To the extent that the department believes this work should be continued, it should be integrated into the operations program as a

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project cost or conducted under the Coordinated Statewide Planning Program.

Coordinated Statewide Planning

The Coordinated Statewide Planning Program is budgeted at \$825,000 in the budget year compared to \$812,000 in the current year. This program is a broad-scale study on a basis (presumably somewhat like a reconnaissance level investigation) of the water demands, the available resources, the existing projects and the probable need for new projects. Its intent is to provide a broadly sketched pattern of water resources development in California to show the need, the scheduling and the interrelationship of projects to one another.

The department attempts to include all pertinent factors influencing local, state and federal project construction. With the complexity of water resources development in California, it is important that the department, as the only agency in a position to view water resources development in all its aspects, make some effort to coordinate and relate the diversity of proposed projects and the competition among water users and water constructing agencies. It is also the vehicle for scheduling and evaluating many broadly related water resources problems which cannot be approached individually. The Coordinated Statewide Planning Program must be rated as a relatively high priority undertaking in the department since the heart of this program should be the basis on which the department's specific project investigations are identified, justified and budgeted for additional study.

Although the department has been working on elements of the Coordinated Statewide Planning Program for approximately 6 years, very little useful information has been developed for the guidance of the Legislature, the administration and the department. Most of the funds, approximately \$800,000 to \$900,000 per year in recent years have been expended on data collection programs. In past years we have strongly recommended that the department curtail its data collection activities and place primary emphasis on the analysis of data now available in order to provide useful information and guidance on the overall relationship of water project planning in California. The Legislature has accepted these recommendations and the department has been reshaping its program. The department published Bulletin No. 160-66 in March of last year which brings certain phases of the California Water Plan up to date. It is the department's intention to develop this approach further and to publish a revision of Bulletin 160 every two years as refinements and new developments require a revision in the overall plan.

In general, we agree with the department that its present emphasis on providing useful planning information from the Coordinated Statewide Planning Program is beginning to show positive results. At the present time and as projected in next year's budget, the department for the first time is attempting to resolve broad-scale water resources development problems such as the timing, need and relative emphasis of the East Side San Joaquin Valley Aqueduct versus expanded

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capacity in the West Side Aqueduct. However, along with this effort to establish overall water resources development approaches, the department is also proposing once again to increase its data collection programs. Unfortunately, it has not yet developed standards, as we have suggested in the past, to demonstrate the degree of present reliability or increased future reliability which can be achieved if the data collection activities to support the Coordinated Statewide Planning Program are increased or sustained.

In view of the above conditions, the next group of recommendations attempts to focus the efforts of the department into the more constructive aspects of the Coordinated Statewide Planning functions and to deemphasize field data collection except where there appears to be some observable relationship between the data collection and the planning work being undertaken by the department.

Land Use and Classification Survey

This is the first of four closely related data collection and analysis programs. The Land Use and Classification Survey is budgeted at \$205,000 next fiscal year compared to \$180,000 in the current fiscal year. This is a data collection program which contributes data to the Coordinated Statewide Planning Program and other planning activities. The data is used to forecast future water use many decades in the future and does not primarily maintain historical data records as in the basic data collection program.

The work in this program consists of two parts, an initial land classification survey (which maps soils and establishes their suitability for various uses) and recurring evaluations of changes in the use of this land to reflect extensions in irrigated agriculture and expansions of urban and industrial areas. Forecasts of long-range water use are made by multiplying the amounts of land in various uses by the units of water use determined under the Unit Water Use Programs discussed below.

It would appear that the Land Use and Classification Survey work could be eliminated or deferred for several years without significant detriment to the Coordinated Statewide Planning Program based on that program's actual need and its presently demonstrated ability to utilize more refined data. Complete elimination might reduce the department's effectiveness in making future studies. *It is recommended that the Land Use and Classification Survey work be reduced approximately half by eliminating \$105,000 and that \$100,000 be allowed to continue this work at a reduced rate in the highest priority areas of the state.*

Unit Water Use, Vegetative and Unit Water Use, Municipal and Industrial

The unit water use studies covering vegetative, municipal and industrial water uses provide data used by the department in forecasting the amounts of water use for extended periods into the future such as the year 2020. These forecasts are based on land use data collected in the program discussed above. In the past, the Legislature has reduced these programs pursuant to our recommendation, but gradually the

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budget level has been increased from the reduced level. While this data is used by many activities in the department, we have been concerned that in general these studies seek to be too precise in establishing details for forecasting future water use. For example, Bulletin No. 113-1 was published in August 1963 and shows the results of vegetative water use studies to that date. The bulletin indicates that these studies have been in such detail and are subject to such extensive variation because of uncontrollable changes in cropping, climatic and vegetative conditions that they have limited usefulness in forecasting long-range future requirements on a broad-scale basis. In appreciation of this difficulty the report recommends efforts to intensify data collection to overcome this problem. Quite the contrary, it would appear more appropriate to generalize the work in order to secure data having a broader and still useful long-range application.

A similar Bulletin No. 113-2, was to have been published by the department in July of 1966. A review of this bulletin would have permitted a more complete analysis of the results currently being achieved by the vegetative unit water use program, but the bulletin has not been published.

In this study (as in the municipal and industrial water use study below), the question is not whether the department will have unit water use data. The question is whether it will use what it has until it can justify collecting more data or whether in the absence of such justification it will continue year after year to collect and refine the data it already has. *It is, therefore, recommended that the entire vegetative unit water use program which is budgeted at \$179,450 be removed from the budget.*

The unit water use study of municipal and industrial water use is budgeted at \$65,450 next fiscal year. This work is intended to provide details of water use in urban areas for forecasting future water use. The department believes that it can make more accurate forecasts of water use in urban areas several decades in the future by analyzing in detail the pattern of water use by industries, households and other urban water users. The increased accuracy if any and its resultant higher costs compared to the use of overall water use data or data supplied by the water distribution agencies in urban areas has not been established by the department.

In this water use study as in the vegetative water use studies, the tendency is to become involved in ever increasing detailed analyses of water use. For example, in next fiscal year the department proposes to determine the amount of deep percolation resulting from watering lawns and ornamental shrubs in southern California in order to determine the amount of return flow of delivered water. Special instrumentation will be used in selected areas at different soil depths and soil and moisture changes will be noted following the application of water. It is not apparent how this type of data can have value commensurate with its costs in the long-run forecasting of water requirements in various urban areas of the state.

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In view of the major revisions for policy reasons which have been made in the contract demands for water from the State Water Project since the initial forecasts of water deliveries from the State Water Project were made in Bulletin No. 78, it appears that the degree of accuracy possible in the forecasting of future water demands is more subject to political, economic and social factors than to forecasting by extremely precise evaluations of water use. *It is recommended that the unit water use studies of municipal and industrial water use be eliminated for a General Fund saving of \$65,450.*

Demand Studies, Coordinated Statewide Planning Program

Although budgeted as a part of the Coordinated Statewide Planning Program which has been discussed above, the demand studies can be more logically evaluated after consideration of the land use and unit water use studies. The demand studies utilize the land use and unit water use data in conjunction with population estimates, projections of economic growth, future markets for agricultural projects, etc., to complete the forecasting of future water uses for the state as a whole. These forecasts of future water demand are the basis for scheduling the need for water supply projects and other project services for many decades into the future. The problem involved in these studies once again is not whether data should be secured but rather, the degree of reliability and accuracy of detail justified for broad-scale studies.

Approximately \$300,000 of the \$825,000 budgeted for Coordinated Statewide Planning is for demand studies on water requirements throughout the state. These studies have been scheduled on the basis of recurring analysis of the entire state in varying degrees of thoroughness every four years.

At the present time, we have found no justification to make further water demand studies other than in the southern California coastal areas and in the southern San Joaquin Valley where these results may have some bearing on the evaluation of East Side versus West Side Aqueduct routing problems. The other water demand studies do not appear to be significant in relationship to the major problems under study in the Coordinated Statewide Planning Program and therefore should be eliminated from the budget. *It is recommended that the water demand portions of the Coordinated Statewide Planning Program be reduced by \$90,000 to allow only the work in the southern San Joaquin Valley and in the southern California coastal area.*

Upper Sacramento River Investigation

The three recommendations below are being made both to reduce costs and to clarify the confusion previously discussed on the justifiable budgetary level and contents of investigations which relate to Coordinated Statewide Planning.

During the consideration of the current year's budget, the Legislature added \$40,000 to initiate work on the upper Sacramento River Basin Investigation. This work is intended to provide a broad plan for flood control in the Upper Sacramento River to replace the Iron Canyon Dam which was found infeasible in the department's Bulletin No. 150 and

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to update the data in Bulletin No. 150. The work is being done in the department's district office in Red Bluff and \$80,000 is included in next year's budget for its continuation.

The department has been unable to explain why a detailed investigation is warranted at this time rather than initially undertaking this flood control analysis in broad terms under the Coordinated Statewide Planning Program. Since the flood control requirements of the area cannot be treated separately from other planning considerations in the area, the broad-scale needs for the upper Sacramento River area can best be developed by the Coordinated Statewide Planning Program. After this has been done and the results made available to the Legislature and the public, it may be that a more specific investigation will be identified which the Legislature would choose to finance.

Since the Corps of Engineers has the basic responsibility for flood control, it is likely, however, that the Corps should undertake any future specific investigation. Therefore, the department's present appropriate responsibility is to relate flood control in the upper Sacramento River Basin to other broad water resources developments and this not only can be done best by the Coordinated Statewide Planning Program but is its very purpose. *For this reason it is recommended that the \$80,000 budgeted for the upper Sacramento River Basin Investigation be reduced to \$40,000 and transferred to the Coordinated Statewide Planning Program. Because there is no program information available on the requirements of the Coordinated Statewide Planning Program to do this work, the \$40,000 recommended to be allowed is merely an approximation of the amount required. In any event, the investigation should be undertaken at a level considerably less detailed than that provided by \$80,000.*

North Coastal Investigation

The North Coastal Investigation includes a preliminary analysis of alternative routes and facilities for a west side conveyance system. This work is to be conducted as part of the specific investigation of the north coastal area instead of being included in the Coordinated Statewide Planning Program. It has a relationship to the upper Sacramento River Basin Investigation and to the feasibility planning work being done by the department in the Eel River area. *In view of the direct relationship of this work to other activities of the Coordinated Statewide Planning Program and the advance long-range nature of the conveyance system, this work should be transferred from the North Coastal Investigation to the Coordinated Statewide Planning Program. Only a transfer in funding is needed to make this change.*

Delta Offstream Storage Investigation

The Delta Offstream Storage Investigation is budgeted at approximately \$80,000 in both the current and budget years. This investigation which is being conducted by the San Joaquin district originally was undertaken to determine in a preliminary manner the possibility of securing additional yield for the State Water Project by adding offstream storage on Los Banos Creek. Such storage would be similar to

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the joint San Luis features of the State Water Project and the Central Valley Project.

This investigation has grown until it is now evaluating alternative sites for other projects. In addition, it has become involved in the determination whether additional capacity should be provided in the State Water Project or in the East Side Canal of the Central Valley Project. As such, the work bears directly upon some of the most important activities underway in the Coordinated Statewide Planning Program.

Perhaps of greater importance is the fact that the Delta Offstream Storage Investigation has indicated the possibility that storage at sites south of Los Banos Creek could be used to provide the 1,000 cubic foot per second deficiency in aqueduct capacity which currently exists in the State Water Project through the San Luis reach immediately above Kettleman City. The department is, therefore, evaluating offstream storage as a means to achieve the full capacity of the State Water Project. As a result, any direct work to provide this capacity should be a water project cost since it is a requirement to operate the project at its design capacity and to meet contractual commitments now in existence.

The emphasis at this time appears to be in determining whether the state should participate in the East Side Aqueduct or add capacity on the west side in its own aqueduct. This problem is already under study in the Coordinated Statewide Planning Program. It is a proper broad-scale, long-range function for that program and should be conducted in that program.

It is therefore recommended that the \$80,000 requested for the Delta Offstream Storage Investigation be reduced by \$40,000 and the remaining \$40,000 be transferred to the Coordinated Statewide Planning Program to supplement that activity. The Coordinated Statewide Planning Program should identify the next step to be taken by the department, that is, whether capacity should be provided in either the East or West Side Aqueducts, or by the development of offstream storage. After such a decision is made, further work to meet the delivery requirements of the State Water Project should be a project cost and not a General Fund cost.

It may be noted that offstream storage in the approximate amount of one to two million acre feet, which is now contemplated, would cost in the range of \$100 million to \$150 million. Much of this cost must be considered as a construction cost of the State Water Project required to meet its contract deliveries which is not presently included in the capital costs of the project. This means that the project costs are presently underestimated and underfinanced to the extent required to provide the 1,000 cubic feet per second in aqueduct capacity above Kettleman City.

Earthquake and Geologic Hazards Programs

Scattered throughout the budget are the following programs which generally relate to the collection, analysis and utilization of earthquake, subsidence and geologic hazards information and data.

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	1965-66	1966-67	1967-68
Earthquake data collection-----	\$280,000	\$375,261	\$444,550
Earthquake data analysis-----	142,000	187,539	169,040
Land subsidence studies-----	89,993	173,204	293,000
Earthquake hazard and engineering criteria program-----	140,881	159,044	123,500
	\$652,874	\$895,048	\$1,030,090

Last year on pages 782 to 785 of our analysis we devoted considerable attention to these programs. We pointed out that the water project is being charged for work which will not have the same direct benefit to the project now that design is being completed. We sketched out alternative approaches including transferring the long-term and research-oriented phases of the work to the Division of Mines and Geology in the Department of Conservation.

The Legislature last year instructed the Resources Agency Administrator, and he agreed, to evaluate these programs in terms of priorities for other work in the Department of Conservation to see if room for General Fund support could not be found in that department's budget. This evaluation was to be on the basis that in the long run it was at least as important to protect the people of the state from the hazards of death and destruction of their private domestic and industrial property from various geologic hazards as it was to prevent the private brush and grasslands of the state from burning.

During the past year the Assembly Interim Committee on Water held a hearing on the question of proper charging for this work and generally concluded that financing from the General Fund should be explored for the long term and research oriented aspects of the work which were of general benefit to the people and industry of the state as well as to the State Water Project. Although the Resources Agency Administrator had appointed two committees to work on the commitments he had made to the Legislature last session, no known results from these efforts have occurred and none are reflected in the Governor's Budget.

For next fiscal year the Governor's Budget presents the same problems as last year except that the level of expenditure has increased approximately \$135,000 to a new high of \$1,030,000. As of the present time we know of no events or additional information which would change the approach we developed last year, except that General Fund money to finance a program of this type is even more difficult to find.

In the light of the above events we repeat our recommendation of last year that the basic, long-term, research-oriented work in earthquake and geologic hazards be evaluated for shifting to the Division of Mines and Geology to be financed by a reduction in the Division of Forestry grass and brushlands firefighting program. In our analysis of the budget of the Division of Forestry we have developed material showing the small number of fires which various firefighting crews responded to during the past three years. This analysis can serve as a basis for further exploration of the question of priorities to determine if funds for earthquake and geologic hazards work cannot be found within the fire-

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fighting program. Since it is not yet known what funds may be needed to cover work transferred from the Department of Water Resources or what funds may reasonably be made available in the firefighting program, we cannot make a specific recommendation. If the Legislature provides the necessary directive, we will explore these possibilities further with the two departments involved.

Water Development Implementation

The water development implementation category includes a variety of programs and regulatory activities of the department which in some manner are considered to go beyond the collection of data and planning for water resources development. We have noted in the past that this program category imparts little meaning and the same difficulties continue in the budget year presentation.

The total of the program is \$5,838,656 which is slightly less than the \$5,925,279 budgeted in the current year. In the financing of this program, the General Fund portion increases about \$160,000 while the water project portion decreases about \$260,000. The principal reasons for reduction in the water project funding are due to the completion of replanning (called advanced planning) of the Upper Feather River Projects, a reduction in the Delta Fish and Wildlife Protection Study and a reduction in the Investigation of Drainage Disposal to San Francisco Bay.

Public Water District Activities

The Public Water District Activities Program includes a collection of minor activities performed by the department in executing statutory functions involving certain local water districts and in collecting information on the activities of these districts.

One of these functions is the inspection of projects approved by the Districts Securities Commission in order to assure that the projects are constructed in conformity with the commission's approval. On occasion these inspections are made simultaneously with the inspections of the department's supervision of safety of dams function which is another General Fund program. The results of the inspections conducted for the Districts Securities Commission have not indicated any serious problems which warrant continuation of these expenditures. Although this inspection is a statutory function which the Districts Securities Commission is not required to finance, in view of the duplicating nature and limited accomplishments of this activity, funds for its continuation should be denied.

Other activities under this program include keeping contact with and following the activities of local water districts. This is a low priority activity which has not produced any significant results. *It is recommended that the Public Water District Activities Program be reduced by \$90,000. This would still allow \$55,000 in the department's central office to provide advice and assistance to the director on his duties as a member of the Districts Securities Commission and to permit compilation and publishing of data on water districts for use by the Legislature and other interested parties, plus approximately \$20,000*

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for continuation of miscellaneous statutory functions without which certain water districts could not comply with statutory requirements for their operations, plus \$8,000 in reimbursements for a total of \$83,000 in allowable expenditures. It is further recommended that the department review this program during the next fiscal year to develop means to divest itself of the statutory functions which it now performs by drafting legislation to turn these functions over to local government.

Recreation, Fish and Wildlife Post Land Acquisition

The department's Post Land Acquisition Program provides the funds used principally by the Departments of Parks and Recreation and Fish and Game for planning recreation facilities and fish and wildlife enhancement features at the individual units of the State Water Project. This is a General Fund program. A somewhat similar program for preland acquisition planning is financed from water project funds. The latter permits sufficient preliminary planning of recreation and fisheries facilities so that an integrated land acquisition program can be undertaken by the Department of Water Resources for both water project and recreation lands.

A comprehensive review has been made of the entire recreation and fish and wildlife planning function as related to the State Water Project. Sites selected to date have been visited by field trips, proposed land acquisition reports have been reviewed and discussions have been held with the responsible officials.

As a result of this review, it is concluded that the Department of Water Resources and the state have embarked upon the planning and construction of many features which are not essential to the State Water Project, whose technical and economic feasibility is questionable, and that the entire program is operating without basic policy decisions and adequate evaluation of the cost factors involved.

For example, it is anticipated that the aqueduct will provide excellent fishing but it is nevertheless proposed, as part of water project costs (to be financed initially with water bond proceeds to be repaid later with General Fund money under AB 12) that additional fishing areas be provided immediately along the aqueduct by the excavation of large pools. There is no explanation why it is necessary to construct additional fishing ponds along the aqueduct if the aqueduct fishing is of the high quality anticipated. There are indications that substantial seepage losses from the fishery and recreation ponds to be constructed adjacent to the aqueduct will occur and that it may be necessary to line some of these ponds with impervious material. These pools may also produce water quality problems whose solution has not been fully developed. In addition, some work has been done on the problems of safety associated with fishing from the aqueduct banks, but no comprehensive analysis of the costs involved or the full feasibility of this approach has been made. No designs of the safety features have been prepared.

Perhaps the most serious problem confronting this program is the fact that the Department of Resources has not established basic policy limiting the extent to which fisheries enhancement and recreation facili-

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ties can be constructed with project funds. Therefore, at various times funds have been expended in preliminary planning for a trails system along the aqueduct, for the construction of fish hatcheries in southern California as part of the water project costs, the pumping of project water upstream along natural channels to provide flowing water through recreational areas located adjacent to reservoirs, for project water releases in streams in southern California which are currently dry in the summer in order to establish year around fisheries, and other similar proposals. Some of these proposals have been dropped, others have not been eliminated. Furthermore, detailed planning has been done on some recreation and fishery areas along the northern part of the aqueduct near the delta and then these facilities have been dropped from the budget because they were close to other existing recreation facilities in the area.

The entire preland and postland acquisition programs should be completely reviewed by the Department of Water Resources and basic policy established. To this end, funds in the postland acquisition program for next year in the amount of \$80,000 should be allowed only for the Statewide Planning Office to establish policy and for the southern district to continue planning of the more traditional onshore recreation features at the terminal reservoirs in southern California. All further planning of aquatic recreation along the aqueduct and fisheries access sites should be terminated until overall policy, costs and feasibility as well as technical problems are resolved. *It is recommended that the sum of \$148,000 be removed from the Recreation Fish and Wildlife Postland Acquisition Program and that only \$80,000 be allowed for the next fiscal year.*

The Preland Acquisition Program is budgeted at \$108,000 for next fiscal year from water project funds. This expenditure is not under legislative control but should be reduced by the department in line with the recommendation above for the Postland Acquisition Program. In particular, the unrealistic planning for development of the Oroville borrow area should be eliminated until overall basic policy decisions are made on the needs, the timing of the financing of recreation developments at Oroville, Oroville-Thermalito and in the borrow areas. The development of these three areas should not proceed simultaneously and relatively independently of each other. A somewhat similar water-project-funded program for the planning of visitor facilities has already been reduced by the Department of Finance in order to eliminate excessive planning of unneeded visitor facilities scattered along the aqueduct at most of the more prominent facilities.

Delta Fish and Wildlife Protection Study

Since 1961 the Department of Fish and Game has been working under contract with the Department of Water Resources to solve the fisheries and wildlife problems associated with the construction of a project to transfer state and federal water across the delta to the state and federal pumping plants near Tracy. The work by the Department of Fish and Game under the initial five-year contract was instrumental in establishing agreement on the plan for a peripheral canal. Recently

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extensions to this contract have been signed which carry the work to 1971 at a total estimated water project cost of \$3,739,000. Presumably most of this cost will eventually be paid by the federal government as part of the joint costs of the peripheral canal.

While much has been accomplished at relatively high cost in past years, the investigation has also tended to drift into consideration of facilities and problems which are not directly and readily identifiable with the State Water Project such as the Suisun marsh. The investigation is actually a separately budgeted and much larger version of the work being conducted under the preland and postland acquisition recreation, fish and wildlife studies already discussed. It suffers from the same lack of clear policies and limitations on the amounts and types of work which can be reasonably considered a responsibility of the State Water Project as the preland and postland acquisition studies.

The current work should proceed to assist in sizing the turnouts to be placed along the peripheral canal for release of fresh water in the delta, for advice to Water Resources on the design of fish screens, and for advice on the initial operation of the Delta Pumping Plant to minimize adverse effects on fisheries. However, the detailed investigation of present water quality and ecological factors in order to develop operating and design information for the peripheral canal needs review and possibly curtailment. It still is not clear that the Fish and Game Preservation Fund should not finance more of these ecological studies which have not traditionally been included within mitigation and enhancement studies on other water projects.

The future impact of the presently unknown major decisions to be made on the peripheral canal and on the San Joaquin Valley drain and their respective operation would seem to be unpredictable to evaluate their precise ecological effect with precision at this time. Some actual operating experience with the peripheral canal would seem necessary to develop the minimum adverse effect on the delta and where possible to enhance the delta fishery and wildlife because of the infinitely complex nature of delta problems. In addition, guidelines need to be developed to limit the extent to which the peripheral canal and the State Water Project will be responsible for enhancing the delta since enhancement in the delta can be virtually limitless. Under all circumstances the work on the delta fish and wildlife protection study should be scheduled and coordinated with any future decisions affecting the timing and the need for the construction of the peripheral canal itself as discussed below.

San Joaquin Valley Drainage Investigation

The San Joaquin Valley Drainage Investigation finances from water project funds the ever increasing costs of studies and investigations leading toward departmental construction of the San Joaquin Valley Master Drain as a joint project with the Bureau of Reclamation. The proposed expenditure of \$770,000 for further investigation work during the next fiscal year is \$50,000 higher than current year expenditure levels.

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We have commented in past years on the department's overlooking of the obvious repayment difficulties confronting this project and its determination to proceed with more planning when very few of the major problems involved in this project have been resolved by previous planning extending over many years.

More recently the department has also created public relations problems of a confusing nature in the San Joaquin Valley because under this "implementation" program it has been doing right-of-way location and preliminary land acquisition work which would normally be budgeted and described as project design and construction rather than as an offshoot of planning. The department has been quietly proceeding toward construction of this project while budgeting the work as though design and construction had not yet been undertaken. This has been a matter of budgetary semantics which has tended to obscure the significance of departmental activities.

An important feature of the continuing work under this investigation is the construction of a \$120,000 pre-pilot plant to develop methods for removing nitrates from the drainage water. If algae can be cultivated in the drainage water and caused to consume the nitrates and if the nitrate or nutrient level can thereby be reduced to a point not harmful in San Francisco Bay, a part of the drainage disposal problem will be resolved. However, we are informed by the department that approximately nine years will be needed to develop sufficient design and operating knowledge to get a full-scale algae stripping plant into operation.

Another difficulty is that the cost of algae stripping is presently estimated to be \$10 per acre foot on top of the costs of the drainage system which are already too high for the beneficiaries to repay. Furthermore, the algae stripping plant should be located near the delta where it can process as much of the drainage water as possible. Even so the product water will still contain too many salts to permit it to be reused. But assuming the product water were to be diluted and reused, it would have to be transported back to the central and southern San Joaquin Valley. Such transportation seems impossible because the algae stripping plant product water cannot be mixed with the aqueduct water being transported to southern California for urban use. The only alternative seems to be to discharge this very expensive drainage water in the delta or San Francisco Bay. The value of the high cost algae stripping has not been demonstrated.

Two years ago we reviewed the repayment problems of the San Joaquin Valley Master Drainage System at the request of the Senate Fact Finding Committee on Water Resources and at that time suggested to the committee that the repayment prospects did not indicate feasibility in the immediate future for state participation as the constructing agent with the Bureau of Reclamation. As an alternative we suggested that the bureau itself construct the first stage of the drainage system which it is required by federal statute to do, and that the state become a participant in the future when a feasible state project could be established. We understand that recently the department has been evaluating such a possible action.

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Finally, there is a lack of internal coordination within the department on investigation and related work which is best illustrated by the fact that a year ago a decision was made to develop a delta water quality monitoring system which would combine in one monitoring system all the water quality data collection for the several separate investigations the department now has underway in its district offices. First steps in getting this coordinated monitoring program underway are only now being taken, with the first positions to be filled in April. The delay has been caused in part by inability within the department to agree on the details of the system to be established.

Our review of the San Joaquin Valley Drainage Investigation indicates, that even though the Legislature does not have the authority to approve the expenditures under this program, the Legislature should give the department every encouragement, even to the extent of a policy directive, to review and curtail this investigation.

Implementation of Delta Water Facilities

This program continues the department's planning efforts leading to the construction of the peripheral canal. As already noted, the work in this program is rapidly passing from the planning phase to the design and land acquisition phase. This is occurring even though the budgeting of the work is not under the title of design and construction or land acquisition.

Work in the next fiscal year budgeted under this program will proceed with the location of a canal centerline, field surveys, preparation of property descriptions, preliminary design of the canal and turnout facilities and preliminary steps in property acquisition. The use of the "implementation" title in this case is once again misleading and does not convey a realistic picture of the work being budgeted compared with other work in the department's capital outlay budget.

The budget for next year includes \$725,000 to continue the work which is budgeted at \$776,000 in the current year. Of prime importance to the Legislature in this program is the timing of the peripheral canal and the question of who will construct and operate it. There is no agreement between the Bureau of Reclamation and the department on these points. In addition, there is a major question on the justification for completing construction of the peripheral canal by 1974 which the department has repeatedly stated is essential.

The basis for the 1974 date is the department's estimates which show there may be some reduction in quality of water pumped from the delta for delivery in the State Water Project without the peripheral canal. This reduction in quality compared to the water quality standards in the state's water service contracts, will continue to increase gradually for a period of several years as the quality of pumped water increases. These quality standards, however, are not requirements in the state's contracts but are merely guides to the quality of water that the department will make every effort to deliver.

The practical consequence of exceeding these quality standards needs to be evaluated in terms of construction problems and the ability of the state and the federal government to move forward smoothly and in

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agreement on a reasonable construction schedule. Among the factors to be evaluated are the fact that Congress has not yet authorized federal participation in the peripheral canal, that other federal projects in the west and in California may be authorized before the canal, that the delta water interests are not yet satisfied that their needs have been met in the plans and proposed operation of the canal, that Oroville storage may be used to repel salinity in the delta for a number of years until the stored water at Oroville is needed for the state's water service contract commitments, that there still is uncertainty on the probable decrease in flows at the delta due to upstream uses and other similar factors.

Early construction of the peripheral canal will also tend to cause its costs to encroach somewhat on the period of peak sales of water bonds. This will increase the amount of water bonds that will have to be marketed under the adverse conditions associated with the large sales of water bonds in the next three years. For all these reasons, a reevaluation of the timing of the peripheral canal appears to be in order.

Investigation of Drainage Disposal to San Francisco Bay

This is an investigation in the San Francisco Bay district of the department which was established with water project funds after the Delta and Suisun Bay Water Pollution Investigation was completed. It may be noted that the pollution investigation was essentially completed almost two years ago and that even though this investigation is purported to have developed valuable information on water quality problems related to the delta and eastern San Francisco Bay, the report on the investigation has not yet been published.

The Investigation of Drainage Disposal to San Francisco Bay has never been clearly defined. Although various activities have been mentioned to be undertaken with the funds budgeted for this investigation, most of these activities either could not be justified as water project costs or else were inconsistent with the Delta-San Francisco Bay Waste Management Study. As a result the funds for this investigation have been reduced from \$106,583 in the current year to \$52,000 in the next fiscal year.

At the present time, the best information we can secure indicates that the money is mainly being used to permit the San Francisco district to keep current with the activities of other agencies of government on matters involving San Francisco Bay water quality. This is not an important water project activity nor does it appear to be an essential form of liaison, especially for a district office that does not have water project activities underway with respect to the bay or delta. The work could be eliminated and the water project costs reduced accordingly.

Operations

The Operations program category includes the operation and maintenance of the State Water Project, water service contract administration, preparation of repayment and financial analyses, cost allocations, Sacramento River flood control maintenance, flood forecasting, flood fighting, watermaster service and other activities of an operational nature. The department's power studies are included in this category.

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Expenditures under the operations category increase from \$7,108,000 in the past year to \$11,195,000 in the current year and to \$15,513,000 in the budget year. The significant increases are for operations and maintenance activities of the State Water Project. The General Fund portion rises from \$2,228,033 in the current year to \$2,280,769 in the budget year.

Sacramento River Flood Control Maintenance

Through the Sacramento River Flood Control Maintenance Program the department maintains most of the major features of the Sacramento River Flood Control Project at a General Fund cost of \$1,143,581 in the next fiscal year compared to \$887,418 two years ago in 1965-66. This maintenance is done as a General Fund expense on the theory that the project protects such an extensive area, particularly with its bypass channels, that it would be inequitable for the landowners and immediate beneficiaries to pay all the operation and maintenance costs. Therefore, the state pays all the costs in most of the areas along the river where federal levee and channel construction has occurred. There are exceptions to this principle which are not readily explainable, but this has been the basic principle applied in the past.

In the 1965 General Session, SB 20, now Chapter 1843, Statutes of 1965, departed from the above principle to add the tributaries and channels of the Sacramento River to the state's maintenance responsibility as well as a federal flood control project in Lake County. This action further confused the basis for determining the state's responsibility and in particular, by adding the Lake County project to the state's responsibility, established a precedent which could extend to the entire state and would mean that the state would take over maintenance of all flood control projects from local government.

We have been advised by the department that the increased state costs attributable to Chapter 1843 are approximately \$40,000 for the two areas which do not involve mainstem features of the Sacramento River Flood Control Project. *It is recommended that this amount of \$40,000 be removed from the department's budget to return the responsibility for the nonmainstem maintenance to the appropriate local agency. It is further recommended that the provisions of Water Code Section 8361 as amended by Chapter 1843, be reviewed by the department and the department advise the Legislature (1) which features of the Sacramento River project are mainstem features suitable for operation and maintenance by the state, and (2) whether any or all of the presently state-operated and maintained features should be turned over to an existing local agency or one which might be created to assume the responsibility for this work.*

River Forecasting and Flood Hydrology

There are two closely related programs in the Department of Water Resources which involve flood activities. One is the Flood Operations Program, budgeted at \$237,988 next fiscal year. This program is the "nucleus" activity in the department for its continuing activities in

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collecting flood data, planning flood operations activities, publication of reports, training departmental and other personnel in flood fighting techniques and maintaining the department's flood operations center.

Closely related and not very clearly differentiated from the above program is the River Forecasting and Flood Hydrology Program which expended \$142,654 last year, is budgeted for \$184,600 in the current year and \$250,794 in the next fiscal year. This program finances the department's flood forecasting activities at the Sacramento Flood Operations Center and at a new satellite flood operations center in Eureka.

In the 1965 General Session, the Legislature approved Chapter 1291 which added general language in addition to previous budgetary approvals to authorize the department to engage in flood forecasting and appropriated \$150,000 to finance the state's share of a joint program with the federal government to reconstruct and expand the flood forecasting network in the north coastal area (at a total joint cost of \$400,000). The reconstructed and expanded network was approved by the Legislature as a result of the December 1964 floods which caused extensive losses in the north coastal area.

We have noted at one time or another the tendency of the department to expand its flood operations activities in general. For example, although there are only 24 new flood reporting stations being constructed in the north coastal area, the department under authority of Chapter 1291, Statutes of 1965, has purchased central office interrogation and printout equipment with the basic capacity to handle 1,000 stations when additional modules of equipment are added. As a result, efforts are now underway to secure funds to convert the older stations in the Central Valley to this new, high-speed equipment and to expand the network into the other areas.

Another example of expansion is that last year we were informed the satellite flood operations center in Eureka would be manned by two engineers on a part-time basis, with about half of their time being charged to field work for planning investigations in the north coastal area. This seemed reasonable and compatible since the flood season and the intensive fieldwork on planning investigations occur at different periods of the year. The budget for next fiscal year, however, includes a senior engineer for 9 months and an assistant engineer for 12 months for the center. The entire satellite center costs are estimated to be about \$50,000 per year. Much of the increase in the River Forecasting and Flood Hydrology Program is for the full-year costs of this center.

Our greatest concern about this program is that it continues to expand in an area of legal sensitivity to liability for damage claims. Money is included in this program to purchase and install department owned and operated stream gaging equipment to permit forecasting the operations of certain Bureau of Reclamation projects. This forecasting is proposed because the bureau does not release information on its intended releases more than several hours in advance during flood emergencies.

The department's effort to overcome the problems in its forecasting process is to install stream gaging equipment which will permit it to

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anticipate how the bureau may operate. We do not consider this expenditure desirable because it overlooks the key to an acceptable forecasting process, that is, wholehearted cooperation and agreement on the forecasting procedures among the department, the bureau and the Corps of Engineers, which are the principal agencies involved in operating flood control facilities on the Sacramento River and its tributaries. Furthermore, the department's proposal intrudes into a function which is a basic responsibility of the bureau.

The fact that the Bureau of Reclamation is unwilling to provide information on its releases more than a few hours in advance to the department or anyone else is the real issue of importance. It raises the fundamental question of the department's responsibilities in forecasting, what liabilities the department may be exposing the state to, and whether the department can issue reliable forecasts of the type it is attempting to issue. The question is particularly hazardous for the state because of the increasing tendency of the state courts to find the state liable in damage actions.

It is recommended that the department's budget be continued at its past year level pending resolution of these problems and that no new stream gaging equipment be purchased until the department has prepared a plan and justification for the long-range flood forecasting program it envisions. Accordingly, the River Forecasting and Flood Hydrology Program should be reduced by \$108,000.

Watermaster Service

The watermaster service is a statutory procedure under which the Department of Water Resources administers court decrees resulting from litigation to settle the respective rights of water users to available supplies of water. The Water Code prescribes that the costs of the program should be shared equally by the state and the watermaster service beneficiaries. Recently the very high costs for departmental overhead which have been added to the program have caused the watermaster service beneficiaries to object to paying half of the overhead costs. The Legislature has concurred and has provided the funds for the state to pay all or more than half of the overhead costs depending on the definition of overhead costs used.

We have pointed out that this is an excessive burden for the General Fund when virtually all the benefits go to the watermaster service beneficiaries. Last year we recommended that the department review certain specific problems involved in the administration of the program, both in the field and in the office, and seek to reduce the costs and secure a more equitable distribution of the local share of the costs among the beneficiaries themselves. We did this because it was evident that any payment of more than half of the costs by the state was tending to subsidize inefficiency in the program and lack of cooperation among some of the beneficiaries in reducing the overall costs of the program. The Legislature directed the department to explore methods of reducing costs and securing increased efficiency.

During the past year the department has done considerable work seeking means to reduce costs and has developed a number of ap-

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proaches which appear to have merit. Other improvements require more work, particularly with the watermaster service beneficiaries and some will require changes in the Water Code.

It is recommended, in order to bring the problem of watermaster service before the Legislature again for further consideration and in order to assure that the state is not subsidizing inefficiency in the program, that funds for half the costs of watermaster administration be removed from the budget for a General Fund reduction of \$26,000.

Operations Management Activities

Under the above title the budget shows a variety of operations programs which cover the various phases of operation of the State Water Project. These programs are financed from water project funds and total \$6,829,122. A number of these programs continue at a high expenditure level comparable to or greater than past years. The accomplishments do not warrant the extensive expenditures.

For example, costs for water contract negotiations are going up rapidly instead of going down now that the basic water service contracting has been completed. Although there are complex provisions in the existing contracts to be administered and details of the surplus water service provisions of the contracts must yet be developed, the biggest reason for increasing costs in this program is the activity of the district offices. It is difficult to determine what is being accomplished by many of their expenditures. Approximately two-thirds of the contract administration money next year will be expended in the district offices for relatively vague activities such as: act as liaison, maintain information files, obtain and forward required information, handle customer relations, work on contract administration procedures, perform studies, and arrange and conduct contract amendment negotiation meetings. As another illustration of high costs, planning and support for various water and power operations and maintenance activities have been going on for many years at a high level and seem to be projected at a high rate into the future.

A relatively new program entitled Operations Water Quality Control has more than tripled in cost during the three-year period in the budget and is shown at \$453,000 for next fiscal year. Among the more questionable aspects in this program which might be mentioned are: determination of preproject water quality conditions which may be influenced by the project, develop monitoring and sampling programs for project water quality, develop water quality forecasting procedures, and establish laboratory requirements. While water quality is a very important facet of project operations, it is also one that is virtually without limit in the detail and extent of the work that can be done. Without careful review, it can consume large sums of money for work that produces only limited results.

State Water Project Power Management

Included within the above group of operations management activities is the State Water Project Power Management Program budgeted at a cost of \$918,000 or about \$100,000 less than the current year. In

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past years we have been particularly critical of this program for lack of accomplishment. However, during the past 12 months the department has resolved most of the urgent power purchase and marketing problems before it. Of particular note was the signing of a power purchase contract for the State Water Project on November 18, 1966.

Although the signing of the power purchase contract was given considerable attention in departmental press releases, the fact that simultaneously the department signed a memorandum contract for the interim sale of Oroville generation with a term until April 1969 was not even reported. The contract provides that the department may use Oroville generation transmitted by the power pool utilities for operation of the state's pumping plants and that the utilities can purchase any remaining power at dump power rates during the period of initial generation before full operation is achieved.

With the execution of the interim contract the department was unable to market the revenue bonds scheduled for the current year to pay for the Oroville power facilities and this bond issue has been rescheduled for next fiscal year. The department believes that the interim contract will be replaced with a long-term contract this summer. However, the revenue bonds still cannot be sold until a water right for power purposes has been secured from the State Water Rights Board and an agreement reached with the Department of Fish and Game on the releases to be made for fisheries benefits.

This analysis and the Legislature have frequently urged the department to proceed with the negotiation and execution of the Oroville power sales contract. The department has delayed the essential task of negotiating a long-term power sales contract until time did not permit its negotiation and execution. Instead an interim contract had to be signed to assure the state a market for its initial generation, to assure that the initial generation could be used at the state's own pumping plants and to permit the power pool utilities to utilize the power. It would be inappropriate to comment here on the possible future events surrounding the negotiations of a long-term contract, but it can be stated that at the time of this writing, not all the problems to be resolved in signing a long-term contract have been agreed on.

If it is assumed that the department does execute a long-term contract this next summer, a number of fairly important tasks still remain to be done including work on the power drops in southern California, firming up details of the power purchase contract, and Feather River headwater benefit evaluations. However, indications are already beginning to show in the budget justification material that a long-term series of studies of value of power, changing power characteristics, etc., are being planned which will extend beyond the current project workload. A part of this long-term workload appears to be marginal considered in the context of the other power work the department also has underway which are required for the direct short-term operation of the power features of the State Water Project.

Two years ago we pointed out that the department was proposing to add a large number of new positions to its power office staff to

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handle the large backlog of work. We suggested instead that the department seek outside consulting services in order to shorten the time needed to get important work such as the Oroville power sales contract negotiated. Furthermore, the department would have to spend a large amount of the time of its then existing staff in recruiting and training new personnel who would not become fully productive until the immediate deadlines had passed. It is evident that this is what has happened, that the department tried to do most of the work with its own staff and missed the important completion date on its Oroville power sales contract.

Another factor in the delays involving the power management work is that the department has not been able to keep its authorized positions filled. There are presently 10 vacancies among the 49.5 authorized positions. Since most of the high priority work of the power program will have been completed by the summer (according to the views of the department's staff) there would seem to be little justification to continue these vacant positions.

**Project Operations and Maintenance Costs for Recreation,
Fish and Wildlife Enhancement**

The Department of Water Resources has computed that it has incurred costs amounting to \$187,997 of which \$43,416 has been included in budgets to date for payment of the operation and maintenance costs of the State Water Project which the Department of Water Resources has charged to recreation, fish and wildlife enhancement. The Department of Finance has declined to include any further General Fund appropriations in the budget until the Legislature has acted to approve the recreation, fish and wildlife cost allocations pursuant to AB 12 (now Chapter 27, Statutes of 1966). At such time as the Legislature acts on project cost allocations and determines the amount of project costs it will pay for recreation, fish and wildlife enhancement, any obligation of the General Fund to the project for accumulated costs will need to be appropriated.

Services

The services category consists of various technical services related to other programs of the department and funded in those other programs. The category includes a direct charge of \$2,082,907 for additional mobile equipment for the State Water Project. Our observations indicate that the department is amply supplied with automobiles and other light automotive equipment for use of its personnel. Judging also from the extensive vehicle operations and maintenance facilities the department is building at the various features of the water project, it also contemplates sufficient heavy mobile equipment. A review of the use and needs for automotive equipment would not be out of order.

General Management and Other Overhead

The general management program category covers the overhead costs of the department as a whole. In general, these costs are not directly related to any specific activity or program but are funded by a series of charges to each work order as a percentage of the salaries and wages

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charged to the work order. This provides a pool of funds which is used to pay the department's overhead or general management costs. Included in the general management category are costs of the director's office and associated staffs as well as departmental administrative costs. For next fiscal year the sum of \$5,081,964 is budgeted which is an increase of \$525,879 over the current year costs and approximately \$1,200,000 over the costs of the last year.

In addition to the general management category which shows in the budget, there are several other levels of overhead costs which are not set out in the budget. These are the costs of supervisors and their staffs at the division, branch, section and district office levels. In each instance these charges are spread over the various programs based on the salaries and wages of personnel working on programs supervised by these positions. While we have concurred in the use of this approach in the past, it is increasingly evident that it has been abused. For example, the number and extent of positions charged to district office overhead has increased recently until it approximates 15 percent of the personnel of a district. This means that these positions are not directly justified or funded on the basis of the workload being supervised, but instead these positions tend to float on top of the individual programs without regard to the size of the programs or to the workload.

Supervisors who have very little relationship to water project activities charge the same portion of their costs to the water project as other supervision, based on the ratio of General Fund to water project expenditures. A detailed investigation would be required to assure that the water project contractors are not being charged a disproportionate share of the department's supervisory costs. There is also a pressure to move direct charge General Fund work, such as portions of the saline conversion program, into departmental overhead where part of the costs can be absorbed by the water project.

Hardly a year has passed in which this analysis has not commented on the extremely high overhead costs of the department, its excessive use of staffs and other problems which increase overhead costs. On occasion when the department moved to correct these problems, its corrective action, was soon displaced by other problems. For example, last year we noted favorably that the supervision of the planning and operations and maintenance functions in the districts had been consolidated under the assistant chief engineer for area management along with the principal staffs responsible for the central office planning and operations and maintenance functions. However, no sooner had this been done than the department began to move personnel from the Division of Right-of-Way Acquisition into the district offices. It thereby recreated the exact situation it had just corrected in which there was no direct line of supervision or even a line-staff relationship between the district offices and a line division in Sacramento. In another instance, the tendency to perform preliminary design in the district offices under the title of "implementation" has created a somewhat similar problem of confused organizational relationships between the Division of Design and Construction and the districts.

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These problems can be traced in part to a desire of the department to decentralize as much work as possible into the district offices in order to build up these offices. In addition there has also been a tendency to diffuse line authority by extensive staff review and the use of layers of supervision so that line supervisors could not take a completed action on any major problem. This over-centralized authority in the chief engineer and the director who in effect held all line authority and in the final analysis were the only persons able to exercise effective decision making in spite of the high cost and highly decentralized organization in the districts.

There are four reasons why this analysis deals in some detail with these organizational and overhead problems this year. One is that more economical and efficient operations are currently being expected of the department. The second is that the reductions in the General Fund support budget recommended in this analysis or those ordered by the Governor will also require a reduction in the department's overhead structure because they will reduce the General Fund base on which the overhead structure is funded. While it would be possible to increase the overhead charges made to General Fund programs and to leave the overhead structure in its present form, this is neither economical nor feasible in the long run. At present, the overhead charges for some programs in the district offices approach 75 percent of the costs of salaries and wages. (This includes a number of operating expenses and leave costs approximating 30 percent.) Even now it is almost impossible to judge the net or effective amount of money in a given program which will actually be available for expenditure on the program work because of the high overhead loading. The third reason is that if the concept of an overhead charge is to have any meaning or logic it must vary in some approximate relationship to changes in the program base. Therefore, the program reductions recommended in the preceding pages of this analysis must be accompanied by some reduction in the overhead structure. A fourth reason is that the Legislature has shown increasing concern about the way water project funds are being used because the water service contractors are objecting to certain funding practices.

It is much easier to sketch the need for reductions in the overhead structure than it is to develop the exact recommendations for reduction. This is because the overhead structure is closely related to the way the appointive officials of a department choose to organize and operate the organization. No two directors will choose to do the job the same way. In the case of the Department of Water Resources, the difficulty is compounded because of the complex operation of the indirect charge system for overhead or general management; that is, it is virtually impossible for us to compute the dollar effect of any particular recommended change. We have, therefore, attached relatively arbitrary prices to our recommendation in order to initially bring the more important reductions before the Legislature. This provides a positive means for the Legislature to direct changes in the overhead structure if it desires. The prices can then be more precisely determined. If the extent

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of our recommended overhead reductions seems large, it is because the \$5 million in overhead costs of the department are high due to the rapid growth of this part of the department in recent years.

Although it might be assumed that a major growth of the department's overhead structure is normal and should be expected in relationship to the increased responsibilities and size of programs the department has undertaken in constructing the State Water Project, the fact is that this overhead, while primarily charged to water project funds, has in many cases had little relationship to the construction of the project. The device of moving positions into overhead where they can be partially charged to project funds has had the effect of greatly stretching the expanse of departmental programs and activities which can be covered by the limited General Fund appropriation. Conversely, the pressure to scatter water project work widely throughout the department has been partly because of the beneficial effect this had in financing overhead costs. A tight concentration of water project activities in a carefully designated segment of the department's organization would not provide near the advantages to the department's overhead structure in terms of elasticity of cost absorption and in the ability to secure funds for new overhead expenditures. Under the present procedures it is only necessary to fill some vacant positions in water project programs to increase the overhead earnings.

District Offices

A major reason for high departmental costs is the establishment of five district offices. Geographically, four would provide a good distribution of the workload and would permit substantial savings in operating costs.

We have repeatedly commented on the fact that the present district organization divides the delta area between three district offices and that coordination of the work involving the delta has been difficult and inadequate. This condition can be most readily corrected by eliminating the San Francisco district and splitting its work between the San Joaquin, Sacramento and northern districts. The Sacramento district would then include all of the delta area. The delta and San Francisco Bay area would be treated as a single geographic entity. Since the operation of the North and South Bay Aqueducts are closely associated with the delta and the Sacramento River operations, one district could better manage the entirety of this operational work.

If any simplification and savings are to be made in the field organization, there is little choice but to select the San Francisco district for elimination. The department has already signed leases, some of which are long term, for specially constructed office buildings in Red Bluff, Sacramento and Fresno for district office space. Only the San Francisco district is not committed by leases for office space.

The practice of leasing handsome office space for the districts has already increased the costs for rent. Comparable costs are difficult to secure and evaluate but the rental costs at Red Bluff are \$1,600 per month higher than previous costs; in Fresno they will be \$2,500 higher per month and the proposed Vallejo lease (now eliminated) would have

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doubled rental costs by increasing them about \$3,800 (including considerably more space).

The district office space which has been secured by lease provides excellent working conditions and this is reflected in the fact that the cost per employee has increased substantially even though the cost per square foot for the space rented is relatively reasonable. It has been noted that these lease arrangements provide at state cost the necessary parking space for employee automobiles while in Sacramento the employees must pay rent to the state for parking space.

Perhaps the most serious problem involved in these leases is that their relatively long terms commit the state to the inflexibility of continuing to use the space, whether needed or not, until the minimum term of the lease has expired. In the instances we have checked, this minimum term runs from 3 to 10 years. It is also worthy of note that the department did not advise the Legislature of its intentions to enter into these lease arrangements, even though it was aware of legislative concern over previous lease problems with district offices during premature efforts to decentralize.

In order to reduce the high cost of decentralization and to compensate for the now existing or sunk costs for district offices which are relatively beyond the control of the Legislature, it is recommended that the San Francisco district office be eliminated for a reduction of \$104,000 in salaries and wages. This will not be a reduction in departmental overhead nor will an equivalent reduction in General Fund appropriations occur. However, there will be some reduction in General Fund needs for the district office programs which the department can compute and provide to the Legislature for adjustment in its budget.

Accounting Services

There are major increases of \$150,000 in the department's fiscal and accounting functions during the next year. Not all of the increased expense shows under general management because about \$530,000 for the utility accounting system for the State Water Project is direct-charged to the operations program. The budget contains approximately \$500,000 in machine computer time for accounting functions alone. Part of the high cost is due to the extremely complex accounting practices of the department which are required by the Burns-Porter Act, multiple sources of funding, the provisions of the water service contracts and dual budgeting and accounting systems.

Last year we noted the unsatisfactory condition of the department's accounting system as reported in the Auditor General's special report. We recommend tentative approval of a number of new accounting positions the department was seeking based on a continued review of the improvements being made in the accounting system by a task force which had been organized to revise the system. We also recommended that the Department of Finance and the Auditor General report to the Legislature on the progress made as of December 1966. The report of the Auditor General shows substantial progress with considerable work remaining to be done.

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We believe that the continuing overview of accounting system revisions by the Auditor General has been beneficial in securing improvements and recommend that the Auditor General be instructed to continue his overview of the revisions and improvements in the department's accounting system during the 1967 calendar year and to provide another progress report to the Legislature in December 1967.

During past years we have carefully noted revisions in the department's budget and have detailed the various steps in the transition to a program budget. Insofar as the Legislature is concerned, this year the department has completed the transition to a program budget. The line item or organization budget has been dropped from the Governor's Budget for next year and the support budget of the department is now presented only on a program basis.

Although the administration is presenting the department's budget on a program basis and appears to have decided that this is sufficient for legislative purposes, it has not made a similar decision for its own control and accounting purposes. The result is that the department will continue to keep accounts on a dual basis, one for the program budget and one on an organization basis. If program control is adequate for the Legislature, we believe that it is also adequate for the executive branch of government. If this is the case, then there is room for savings by eliminating some of the organization accounting activities in the department.

We have asked the department what savings could be secured by eliminating organization accounting. The response was approximately \$30,000 per year. A brief review of possible savings showed that nearly all accounting done for the organization accounts would still be required for other reasons. In other words, program accounting would not of itself produce significant savings or simplify the vastly complicated accounting structure of the department. It develops that the confused organization of the department, overorganization in some areas, the system of overhead charges for departmental administrative costs and the excessive decentralization of relatively minor but specialized activities to the district offices have created a massive and complex block to simplification, cost savings and needed improvements. In short, the system has become so complex that single-purpose simplification and one-step improvements are virtually impossible to make. Instead, it is necessary to make a number of basic parallel decisions in order to unscramble the present conditions.

This analysis is not in a position to make recommendations for the necessary corrective action, nor could the Legislature fully implement recommendations for corrective action because many actions must be taken within the executive branch of government. *It is recommended, in order to give legislative direction to initial steps to eliminate dual accounting in the Department of Water Resources, that \$30,000 be removed from departmental overhead to take the presently feasible steps toward eliminating dual accounting.*

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Consolidate Program Control and Budget Office

For a number of years we have been concerned that there is extensive duplication of functions and workload between the budget staff and the program control staff at the departmental level. The program control system was organized several years ago as a badly needed method of establishing scheduling and dollar control over the design and construction of the State Water Project. It is still needed for engineering control of detailed design, construction and land acquisition schedules. However, this control should not extend to fiscal controls nor include traditional budgetary and accounting functions. Since the budgetary system and its related fiscal controls are required by statutes and are the standard operating procedures of state government, these statutory functions should be the basis on which consolidation of the fiscal functions of the program control and budgetary functions are made. Illustrative of the duplicating effort and the similarity of functions is the publication of competing instructions entitled Program Managers' Guide to Budgeting prepared by the budget office and a similar publication entitled Program Managers' Guide to Program Control prepared by the Program Control Office. *In order to reduce this segment of the department's overhead costs and to provide for more economical and efficient operations, it is recommended that \$50,000 be removed from the department's general management program category.*

Consolidate District Program Control and Administrative Offices

A somewhat similar duplication exists in the district offices between the program control and the administrative services activities. There is no need for both functions at the district office level and some consolidation can be made. *It is recommended that \$40,000 for one position and expenses for northern, Sacramento, San Francisco and San Joaquin district offices be removed from the budget. These positions are funded by charges to district programs and are not part of the departmental overhead.*

General Staff

One of the highest cost areas of departmental management is the general staff located in staff and services management. The general staff consists of a variety of specialists who perform various functions in reviewing, commenting on and advising the department's top personnel in the field of their respective specialties. In most instances this staff is not performing functions which are department-wide in scope and therefore they should not be a part of departmental overhead. In addition, this staff tends to make the delegation of responsibilities within the department confused and uncertain because the role of this staff to other staffs and to line supervisors is not clear. In most instances these general staff positions perform functions similar to the Statewide Planning Office. *It is recommended that the general staff be abolished and that the personnel be transferred to the appropriate line organizations and absorbed within vacant positions in those line organizations. Accordingly, a reduction of \$370,000 in general staff salaries and wages plus operating expenses is recommended.*

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Graphic Services

In reviewing next year's budget request we have given special attention to the graphic services function because of its rapid increase in expenditures. Last year the expenditure was \$254,748, in the current year \$321,335 is budgeted and in next fiscal year \$571,859 is budgeted. Apparently about \$200,000 in the budget year increase is due to a change in the method of charging for materials and supplies. Presumably this is compensated for by a reduction elsewhere in the budget but we have been unable to identify this reduction since it is dependent on changes in rates for overhead charges.

The graphic services function supplies photographic services in the central office, mimeographing and duplicating services and various graphic design and drafting services. We have asked for and received a complete listing of all work performed under the graphic services function during the past calendar year. A review of this work performed shows substantial misuse of the facilities available. For example, an inside cover was designed for the state telephone directory, emblems were designed to be engraved on cuff links purchased by private funds and presented as awards to top employees, picture albums of water project progress were made for personal use, charts for the reorganization of state government were prepared and many similar activities were performed. Much of the work performed was proper but some was not.

The printing workload of the reproduction shop has been very heavy with a considerable scattering of low priority activities. More difficult to assess is the extent of photographic activity. Although much of this photographic workload has been appropriate, a significant proportion has not. The practice of making photographic organization charts has spread through the department and this involved departmental portraiture. The amount of color photographs for office decorations, exhibits, etc., is higher than it needs to be. Numerous other examples could be cited. It should be noted that some work has been done which is not even a departmental responsibility and that the water project has been charged 85 percent of these costs. Even worse is the fact that major work has been direct charged to the water project which has the effect of double charging the project.

Several years ago the Legislature reduced the department's request for photographers to several positions in Sacramento. This staff was justified by the department on the basis of need to photograph construction activities on the water project. Since then 10 photographers have been added in construction field offices and three darkroom trailers have been procured for field use. The five photographer positions and three related positions in Sacramento have been supplanted in their water project photographing activities by the direct charge positions in the field. The total of 18 positions in photographic work is excessive for the department's needs.

The department needs to evaluate the practice of making construction progress photographs every two weeks at numerous selected sites during construction and relate this to some measure of use for the

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vast number of pictures taken, such as use in law suits, damage claims, etc.

It is recommended that the graphic services function be reduced to the level of last year plus adjustments for materials and supplies for an approximate reduction of \$130,000 in departmental overhead. In addition, a rigid rule should be applied that all graphic services work be either charged to overhead or direct charged but not both.

Miscellaneous Reductions

Along with the other reductions specifically recommended above, there is room for further reductions and savings by eliminating a variety of positions which are marginal at best and which under a revised organization and method of operation may not be needed at all. At least one position in the layering of the top echelons of the department consisting of three deputy directors and a chief engineer could be eliminated. The tour and conference coordinator and the recently established secretary for the water service contractors council, one or more special assistants to the deputy directors and reductions for clerical positions could be made. The public information activity could be reduced at both the headquarters level and at the district office level where a new series of monthly information letters for public distribution has recently been started. While substantial savings could be made in eliminating these positions, we hesitate to recommend any specific set of reductions because the director should have some latitude in organizing his immediate working staff. This analysis is calling attention to the possible reductions in order that the department can give special attention to these positions and prepare a special justification if any are retained when next year's budget is prepared.

Operations Organization

An area of increasing organizational importance within the department is the responsibility for operation of the features of the State Water Project. The department has passed through a phase of intensive planning to a phase of expediting construction. While many preparations have been made as discussed under the operations category for the operation of the State Water Project, the department is essentially unorganized for the increasingly important operations responsibilities.

One of the difficulties is the splitting of the main operations functions into many parts which are scattered throughout the department. This problem starts with a division of functions in the district offices, which was done for classification purposes, and is accentuated in the Sacramento headquarters where there is a triangular relationship between the statewide operations office, the power office and the contracts and repayment function. In addition the fiscal responsibility lies in the controller and the department's bond advisor. The appointment of a secretary for the water contractors council has further confused the entire picture.

Perhaps the most important aspect of this organizational problem is that the department has not recognized any role for the relatively traditional aspects of business management in the operation of the State

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Water Project, that is, the responsibility to assure that it is operated and maintained efficiently and at least cost, to handle contractual relations and to keep the water service contractors satisfied. The department partially recognizes these as engineering responsibilities but the problem is that no single responsible authority exists which has the authority to assure the businesslike operation of what is rapidly becoming a two billion dollar operating entity similar to a large corporate public utility. *We recommend that the Legislature direct the department to undertake plans to establish a more business oriented approach to the management of its utility operations.*

Design, Right-of-Way and Construction

Ever since the first activities in the construction of the State Water Project at Oroville, the department has been confronted with a variety of very difficult problems due to the existence of Water Code Section 11590. This section precludes condemnation actions to secure utility or local government property where relocation or acquisition is part of the construction of the project. In essence the section requires that the department replace the property with new facilities of like character and at least equal usefulness.

The Legislature attempted several years ago to amend this section to provide a more equitable basis for the relocation rather than specifying replacement with new facilities. The department preferred unlimited powers of condemnation. As a result no revision was made in the code section and the department became involved in the well-known litigation to find ways around Section 11590 insofar as the Feather River Railroad was concerned. It finally negotiated a settlement and the provisions of Section 11590 were forgotten.

Recently another serious problem has arisen regarding the relocation of the Miners Ranch Canal of the Oroville-Wyandotte Irrigation District. Prior to initiating construction of the Oroville project, the department decided that it would not seek integration of the Kelly Ridge powerplant of the Oroville-Wyandotte Irrigation District with the Oroville project. This decision was made even though integration would have resulted in a cooperative endeavor which might have saved the state some construction capital.

Now that the Kelley Ridge powerplant and the Miners Ranch Canal, which services it, have been constructed, the Oroville-Wyandotte Irrigation District has brought action before the state Public Utilities Commission for an order, pursuant to Water Code Section 11592, directing the department to relocate the Miners Ranch Canal because it will be partially inundated by the Oroville Reservoir. As a result, the department is back in the courts again seeking legal means to reduce the financial burden Section 11590 places on the state.

In this case, unless the department is successful, it appears that the water project will pay twice for part of the combination of costs of the Miners Ranch Canal and Kelley Ridge powerplant, initially when it did not seek to integrate the facility with the Oroville project and secondarily if it is required to replace the facilities which should have been integrated. While the outcome of these actions is unknown, the

Department of Water Resources—Continued

very existence of the problem points up once again that Water Code Section 11590 remains as an expensive burden on the State Water Project. *It is recommended that the Legislature once again seek to amend Section 11590.*

As construction has proceeded on the State Water Project and as the results of departmental decisions on many policies affecting the project have become more evident, we have become concerned about evidences of expenditures which appear to exceed necessary levels and thereby dissipate project capital. In some instances, these decisions will also have continuing long-range implications in high operations and maintenance costs.

We might cite several examples. Last December a contract was let for the construction of a new operations and maintenance headquarters at Oroville. This complex will eventually cost approximately \$2,500,000 to build. It will be located adjacent to the present construction headquarters on Glenn Drive east of Oroville. The two structures, relatively similar, will sit side by side. Each will have an administration building and each will have shops and storage buildings.

The department has insisted that it was necessary to construct entirely new facilities, but it has not advanced evidence that any serious consideration was given to remodeling the present construction headquarters or securing space temporarily to take care of the peaking of activities as operations begin while construction is still being completed. The present structures have been described as "temporary" and we have been assured that they can be depreciated or that other departments will take them over.

We do not find that the department's explanations reasonably justify the new construction. The water service contractors will be asked to pay unnecessarily high costs for these two sets of structures unless the Legislature decides to provide General Fund money to permit the Department of Beaches and Parks and the Department of Fish and Game to purchase the construction headquarters facilities. If they are "temporary" and inadequate for the State Water Project, they were obviously poorly designed by the department in the first place and would not seem to be a good investment for the General Fund to make for any other department.

In addition, a mobile equipment maintenance building is being constructed at Thermalito. The explanation for this structure is that heavy equipment should not be moved through Oroville to Glenn Drive. This may indicate that if a new operations and maintenance headquarters is needed at all, it should not be located on Glenn Drive but should be located where one complex could service the entire Oroville-Thermalito area.

The recently completed operations and maintenance facilities at the Delta Pumping Plant are not only very high in quality, including backup air-conditioning for the operations control room, but also include considerably more expensive and elaborate visitor facilities than are necessary. A small auditorium for showing pictures, walnut paneled displays and a reflection pool have been constructed in this remote

Department of Water Resources—Continued

portion of the Delta where very few visitors will normally come. These facilities do not involve any General Fund costs but will be repaid entirely by the water service contractors.

In past years we have pointed out the very high ratio of construction supervision expenditures to the costs of the construction being supervised. More recently we have observed what appears to be an excessive number of departmental inspectors on the construction site along with a large number of vehicles. The department believes that it does not as a whole have an excessive number of construction supervision employees although recognizing that on occasion delays in awarding contracts, recruitment problems or other factors may result in the temporary unbalancing of workload with personnel. Of most importance is the fact that the entire matter is one of opinion and judgment. The department does not have any objective basis for determining its staffing needs and essentially relies on the judgment of its field supervisors to assign personnel and to keep them busy on needed work. As long as the department has no staffing standards, it is not possible to make any objective evaluation or justification of the adequacy or excessiveness of field construction staffing.

It should be observed that the department has on the whole performed well in meeting its construction schedules. The relatively simple organization structure in the Division of Design and Construction has contributed to this accomplishment. On the other hand, the entire construction program has been expedited over the past years without serious concern for the increased costs that have resulted. The 1972 target date for delivering water to Perris Reservoir has not been measured against the increased costs that result from crowding design, compressing land acquisition, securing orders of immediate possession, recruiting and training for peaking employment requirements and similar factors.

Mention has already been made of the critical financing situations being created by the high peak of construction costs now being incurred in this and the next two fiscal years. At the time the department decided to issue revenue bonds to pay for the Oroville power features, it was contemplated that this additional financing would provide a substantial reserve for project financing. With only about one-third of the project construction funds now expended, this reserve has disappeared. The department has recently been provided additional financing amounting to \$5,000,000 per year for costs allocated to recreation and fish and wildlife enhancement. These and all other project resources are now fully committed.

Whether the project is now adequately funded is open to question in view of the rapid absorption of the additional funding provided in recent years. A reassessment of the project and a realistic appraisal of costs versus scheduling urgencies and an effort to eliminate needless expenditures and unnecessary frills seems to be in order at this time. Since the state presently has no other source of funding to contribute to the project because of the shortage of General Fund money and since the water project is already seriously impinging on the state's

Department of Water Resources—Continued

general obligation bonding capacity, it seems reasonable to expect the water project to live within its available financing.

STATE WATER RIGHTS BOARD

ITEM 218 of the Budget Bill

Budget page 773

FOR SUPPORT OF THE STATE WATER RIGHTS BOARD
FROM THE GENERAL FUND

Amount requested in budget bill		\$1,060,636
Budget request before identified adjustments	\$1,168,462	
Increase to recognize full workload change	10,022	
Budget as adjusted for workload change	\$1,178,484	
Adjustment—undetailed reduction (10 percent)	117,848	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET----- \$120,000

RECOMMENDED REDUCTION FROM APPROPRIATION
REQUEST ----- \$2,152

Summary of Recommended Reductions

	Amount	Budget Page	Line
Reduce staff and operating expenses	\$120,000	773	57

GENERAL PROGRAM STATEMENT

The State Water Rights Board, composed of three members appointed by the Governor, was created in 1956 as an independent state agency with responsibilities as defined under Division 2 of the Water Code. The board, with an authorized staffing level of 91 positions, handles administrative procedures relative to the appropriation of unappropriated water, provides assistance to the courts in water rights controversies through the court reference procedure, assists holders of water rights through the statutory adjudication procedure, and records certain data on ground water extractions in southern California. The board conducts hearings to resolve conflicting applications for permits to appropriate water, investigates facts relative to protested applications and insures, through permit and license inspections, that water covered by a permit or license actually is put to beneficial use as required by California water law.

Two additional functions were given to the board by the 1965 Legislature. The first of these functions is designed to provide an inventory of water diversion and use on a statewide basis by requiring each person who diverts water from streams or lakes (and does not presently have on file with the board an application, permit, or license to do so) to file with the board a statement of his diversion and use, unless such diversion is regulated by a watermaster.

The other new function involves the administration of applications filed by the Department of Water Resources to appropriate water. These "state filings" were handled by the California Water Commission prior to the 1965 legislation which transferred jurisdiction over these matters to the Water Rights Board. Recent expenditures by the board are shown below.

State Water Rights Board—Continued

Table 1

State Water Rights Board—Support Expenditures

Source of Funding	1963-64	1964-65	1965-66	1966-67 *	1967-68 †
General Fund -----	\$948,837	\$1,005,073	\$1,007,748	\$1,153,359	\$1,060,636

* Estimated.

† Appropriation request after applying adjustment factors.

ANALYSIS AND RECOMMENDATIONS

The proposed support budget for the board, after an increase of \$10,022 to recognize full workload change, is \$1,178,484. After applying the percentage reduction of 10 percent (amounting to \$117,848), the Budget Bill proposes an appropriation of \$1,060,636 for support of the board.

For the past three years, the board has experienced continuing workload decreases, particularly in the application processing function, which have permitted the board to shift some personnel to the license inspection function in order that a field inspection could be made of each project at the end of the development period allowed by the permit. As a result, some permits have been revoked and additional water supplies made available to people prepared to make prompt use of them. New applications for permits totaled 308 in 1965-66, compared to 372 in 1964-65, 460 in 1963-64, and 536 in 1962-63. A part of this reduction reflects the recent policy of the U.S. Forest Service not to file on developments within national forests. However, as the amount of water available for appropriation continues to decline, greater caution must be exercised by the board in determining whether new applications should be approved.

Since the board has been able to adjust to changing workload requirements over the past three years by shifting positions to the field inspection function and placing greater emphasis on informal conferences with parties to water rights controversies, accumulated backlogs in these functions have been reduced from the level of prior years, despite the fact that the board has had a number of vacant positions. Presently, there are 7 unfilled technical positions and 1.5 vacant clerical positions. Although this number of vacant positions is somewhat higher than it was two years ago, we noted in our analysis of the 1965-66 Budget Bill that if workload reductions continue to occur in major functions there would be a need to reevaluate the board's personnel requirements.

In view of the increasing emphasis on budgetary reductions, we believe that the board could eliminate these unfilled positions and secure more effective utilization of the three high-salaried, full-time board members, one of whom is an attorney and one an engineer as required by statute. These members could assume more direct responsibility for writing their opinions, and thereby free for other duties staff members who generally assist in these activities. Similarly, the attorney and engineer members of the board could assume more active roles in performing field investigations of major projects and in conducting court

State Water Rights Board—Continued

reference procedures, rather than being assisted by staff members who have the same professional training.

Based on the above comments, we recommend that the budget be reduced as follows:

1. *Eliminate 8.5 vacant positions for a savings of \$90,000.*
2. *Reduce operating expenses by \$20,000.*
3. *Increase utilization of board members and reduce technical staff, \$10,000.*

RECLAMATION BOARD

ITEM 219 of the Budget Bill

Budget page 775

FOR SUPPORT OF THE RECLAMATION BOARD
FROM THE GENERAL FUND

Amount reimbursed in Budget Bill		\$1,219,787
Budget request before identified adjustments	\$1,197,866	
Increase to recognize full workload change	159,889	
Budget as adjusted for workload change	\$1,357,755	
Adjustment—undetailed reduction (10 percent)	137,968	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET... \$159,889

RECOMMENDED REDUCTION FROM TOTAL REIMBURSE-
MENTS... \$21,921

Summary of Recommended Reductions

	Amount	Budget Page	Line
Remove workload adjustment	\$159,889	776	59

GENERAL PROGRAM STATEMENT

The Reclamation Board was created in 1911 with the regional responsibility of controlling the floodwaters of the Sacramento and San Joaquin River systems. In 1957 the Legislature placed the board within the newly created Department of Water Resources, but authorized it to retain its independent powers, responsibilities, and jurisdiction. The board, now a part of the Resources Agency, consists of seven members appointed by the Governor.

Generally, the board's activities are performed in conjunction with the United States Army Corps of Engineers, which does the actual construction work on all flood control projects except that portion of the San Joaquin project lying between the mouth of the Merced River and Friant Dam. The Department of Water Resources is constructing this project under an agreement with the Reclamation Board. The major activities of the board are the acquisition of lands, easements, and rights-of-way necessary for the construction of flood control projects and the design of roads, bridges, and utilities which must be relocated. The board also assumes certain maintenance obligations which it passes on to local agencies and issues permits for encroachment on river channels within the board's jurisdiction. Recent support expenditures by the board are shown below.

Reclamation Board—Continued

Table 1

Reclamation Board—Support Expenditures					
Source of funding	1963-64	1964-65	1965-66	1966-67*	1967-68†
General Fund -----	\$143,713	\$113,482	\$138,889	\$150,295	--
Reimbursement from local assistance (General Fund) ---	677,878	812,286	870,998	1,042,761	\$1,219,787
Totals -----	\$821,591	\$925,768	\$1,009,887	\$1,193,056	\$1,219,787

* Estimated.

† Proposed reimbursement from local assistance after applying adjustment factors.

ANALYSIS AND RECOMMENDATIONS

The proposed support budget for the board, after an increase of \$159,889 to recognize full workload change, is \$1,357,755. After applying a percentage reduction of approximately 10 percent (amounting to \$137,968), the Budget Bill proposes a reimbursement of \$1,219,787 from the board's capital outlay (local assistance) appropriation for support of the board. As indicated in Table 1 above, the board's proposed support budget has been prepared as a total reimbursement from the capital outlay appropriation, rather than only as a partial reimbursement as in prior years.

The \$159,889 received by the board to recognize workload change more than offsets the reduction of \$137,968 in the proposed workload budget. The Legislature approved 12.1 new positions last year for the board and the board is now fully staffed at its authorized level of 96.1 positions. The impact of these positions has not yet been demonstrated on the backlog of work. Moreover, a recent reduction in the availability of federal flood control funds for the Sacramento River bank protection project from \$3 million to \$1.3 million will tend to reduce the board's workload requirements in the budget year and compensate for any increased workload previously expected. As a result, it appears that the board can continue with its existing staffing level. Following is a table which shows the board's local assistance funds and the projects now active.

Table 2

	1965-66	Estimated 1966-67	Proposed 1967-68
Sacramento River and tributaries flood control project -----	\$229,379	\$460,396	\$1,516,646
San Joaquin River and tributaries flood control project -----	2,712,210	1,437,870	429,935
Fresno River flood control project -----	1,414	27,207	60,971
Chowchilla River flood control project -----	353	40,444	44,101
Mormon Slough flood control project -----	428,911	1,266,248	1,160,282
Sacramento River bank protection project -----	2,136,638	1,148,931	1,396,796
Totals, flood control program -----	\$5,508,905	\$4,381,096	\$4,608,731

We recommend removal of the workload adjustment of \$159,889.

COLORADO RIVER BOARD

ITEM 220 of the Budget Bill

Budget page 777

FOR SUPPORT OF THE COLORADO RIVER BOARD
FROM THE GENERAL FUND

Amount requested in Budget Bill		\$242,494
Budget request before identified adjustments	\$267,276	
Increase to recognize full workload change	2,162	
Budget as adjusted for workload change	\$269,438	
Adjustment—undetailed reduction (10 percent)	26,944	
RECOMMENDED REDUCTION FROM WORKLOAD BUDGET		\$269,438
RECOMMENDED REDUCTION FROM APPROPRIATION REQUEST		\$242,494

GENERAL PROGRAM STATEMENT

The Colorado River Board is responsible under the Statutes of 1937 (now Part 5 of Division 6 of the Water Code) for protecting the rights of 6 local water districts in southern California to the use of Colorado River water. The board, composed of a representative from each of these 6 local agencies, employs a staff of 19 positions. Major functions of the board consist of compiling and analyzing engineering data, engaging in interstate conferences and appearing before Congress and interested federal agencies relative to existing and proposed uses of the river water and its supplementation.

ANALYSIS AND RECOMMENDATIONS

The five-year expenditure pattern of the Colorado River Board is shown below. All expenditures are from the General Fund.

Colorado River Board—Total Expenditures				
1963-64	1964-65	1965-66	1966-67 *	1967-68 *
\$211,119	\$218,218	\$225,583	\$263,312	\$267,276

* Estimated

With the completion of the board's activity in preparation and support of the trial proceedings in Arizona vs. California concerning rights to Colorado River water, the expenditure pattern of the board has held relatively constant. The board has settled into an expenditure level for 19 positions which provides it with the capacity to collect data on Colorado River hydrology and uses, to participate in the negotiation of legislation to authorize additional projects involving the Colorado River and to undertake a variety of limited scope studies of Colorado River water oriented problems.

Last year we strongly urged the fullest possible coordination between the Department of Water Resources and the Colorado River Board. To the best of our knowledge this coordination has occurred at the technical level and we know of no major differences between the two agencies with respect to matters involving the Colorado River and other waters of the state.

When the Resources Agency was organized in 1961, the Colorado River Board asked and was permitted to remain outside of the agency. However, the period since 1961 has been an active and critical period for California in the formulation of policy and in cooperating with

Colorado River Board—Continued

its sister states and the federal government in a wide variety of actions both to protect California's entitlement to Colorado River water and to secure interregional imports of more water into the Colorado River.

In undertaking these more recent activities California has had to make substantial adjustments in its approaches. The Director of Water Resources has been named chairman of a three-member commission consisting of a member of the Colorado River Board and a third public member all of whom represent California on the Western States' Water Council. A California advisory committee was established by the Legislature to provide a broad base for securing advice and opinion within California to be reflected in the positions taken by the state's three commissioners on the Western States' Water Council. A new program with a budget request of approximately \$200,000 has been established in the Department of Water Resources to provide staff backup for California's activities in the Western States' Water Council, on Colorado River water problems, on water resources planning matters among the 11 western states, and in relation to any federal planning or congressional activities.

At the same time the nature of the state's interest in Colorado River water problems has changed. While the retention of California's rights to Colorado River Water is just as important as ever, attention is now being directed to supplementation of the Colorado River in order to provide sufficient water in the river to meet California's and other Colorado River states' needs. This has brought into the picture the possibilities of importing Columbia River water, using California's north coastal waters or developing other sources such as saline conversion. It has also raised the important question of how new water supplies would be transported, whether through enlargement of the State Water Project, enlargement of the proposed federal eastside Canal along the eastern side of the San Joaquin Valley or other out-of-state routes.

Other problems have occurred from time to time such as determining the relative importance of conserving water in the lower Colorado River through channelization compared to enhancement of fishery and recreational possibilities. Even the relative priority of authorizing new federal projects in California versus authorization of projects in the Colorado River basin states has become involved.

The greater importance and the relatively inseparable relationship of Colorado River problems to California as a whole have required that state policy be increasingly established at the level of the Governor, the Legislature, the Resources Agency Administrator and the Department of Water Resources rather than by the Colorado River Board.

The exclusion of the Colorado River Board from the Resources Agency has resulted in at least one instance recently in which the board and the administrator expressed divergent views on the question of channelizing the lower Colorado River. It is well known that even greater and more important differences of opinion existed on

Colorado River Board—Continued

the proposed Pacific Southwest Water Plan of the Secretary of the Interior and on the extent to which California should seek guarantees of its 4.4 million acre-feet entitlement to Colorado River water. In the latter two cases the position of the state was primarily resolved after the Legislature pursuant to public hearings developed the facts pertinent to the problems of identifying and protecting California's interests.

The above events indicate that the Colorado River Board is no longer the principal means of expressing the state's position on matters directly or indirectly relating to the Colorado River. The matters have become so complex and important that the prestige of the Governor's office and the Legislature are required to express the state's interest in the Colorado River and also in the many interrelated problems. The Colorado River Board, even though remaining a state agency, is now essentially expressing the position of the six local water agencies represented on the board. The board, in fact, recognizes this condition and no longer really seeks to express the view of the entire state. Its existence as a state agency seeking to continue General Fund financing for its activities obviously must exercise a restraining influence on the board's ability to speak forcefully and effectively when the interests of the six member agencies differ from the views of the administration. The board could operate more effectively under such circumstances if it clearly and directly represented the six member agencies and were fully financed by them.

The question of continued General Fund support for the Colorado River Board is not whether California will protect the important rights of the six member agencies to Colorado River water. It is whether the state will finance the necessary state activities at the state level and still continue to finance the activities of what is now essentially a local agency of government which could appropriately be financed by the six member agencies of the Colorado River Board who have assessed the valuation, the interest and the capability.

In recognition of the primarily local function of the board, the six member agencies could assume its functions and finance its staff through a joint exercise of powers agreement. Since the state is not financing special state agencies to represent the north coastal area, the delta or the Central Valley in solving their water problems, it should not continue this practice for the Colorado River interests.

It is recommended that Item 220 be removed from the Budget Bill.

WATER QUALITY CONTROL BOARD

ITEM 221 of the Budget Bill

Budget page 779

**FOR SUPPORT OF THE WATER QUALITY CONTROL
BOARD FROM THE GENERAL FUND**

Amount requested in Budget Bill.....		\$1,309,553
Budget request before identified adjustments.....	\$1,315,386	
Increase to recognize full workload change.....	139,673	
Budget as adjusted for workload change.....	\$1,455,059	
Adjustment—undetailed reduction (10 percent).....	145,506	

Water Quality Control Board—Continued

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET----	\$139,673
BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING	\$5,833

Summary of Recommended Reductions

	Amount	Budget Page	Line
Eliminate workload increase-----	\$139,673	779	66

GENERAL PROGRAM STATEMENT

The Water Pollution Control Act of 1949 established a State Water Pollution Control Board and divided California into nine water pollution control regions, each of which is administered by a semiautonomous regional board. The 1963 Legislature broadened the responsibilities of the boards to include the control and maintenance of water quality and changed the name of the boards to reflect the emphasis being placed on this function.

The state board, which consists of the Directors of Water Resources, Fish and Game, Public Health, Agriculture, and Conservation, plus nine members appointed by the Governor, is responsible for formulating and adopting a statewide policy for control of water pollution and water quality; reviewing water pollution and water quality control policies adopted by the regional boards; administering statewide programs of federal financial assistance for sewerage construction; correcting pollution conditions not corrected by regional boards; administering research programs relative to water pollution and water quality control; and coordinating and submitting budget requests for the regional boards.

The regional boards, composed of seven members appointed by the Governor, are responsible for formulating and adopting long-range plans and policies for control of water pollution and water quality; recommending projects for federal financial assistance; coordinating programs of abatement and prevention of water pollution; assisting the development of self-policing waste disposal programs; enforcing water pollution laws through appropriate federal, state, and local agencies; prescribing discharge requirements for all existing and proposed waste dischargers; and issuing cease and desist orders in cases of noncompliance with discharge requirements. The five-year expenditure pattern of the state and regional boards is shown below.

Table 1
State and Regional Water Quality Control Boards
Support Expenditures

<i>State board</i>					
<i>source of funding</i>	1963-64	1964-65	1965-66	1966-67 *	1967-68 †
General Fund ---	\$161,183	\$214,346	\$186,391	\$301,649	\$288,400
Federal funds ---	291,639	295,132	225,513	294,200	294,200
<i>Regional boards</i>					
<i>source of funding</i>					
General Fund ---	675,449	900,166	925,748	1,186,110	1,021,153
Total support expenditures--	\$1,128,271	\$1,409,644	\$1,337,652	\$1,781,959	\$1,603,753

* Estimated.

† Total after applying adjustment factors to General Fund support budget.

Water Quality Control Board—Continued

ANALYSIS AND RECOMMENDATIONS

The state board continues to experience severe difficulty in meeting its responsibility for developing and implementing a statewide water quality policy as required by legislation enacted by the 1963 and 1965 Legislatures and as mandated in recent federal legislation requiring states to establish water quality objectives by July, 1967, or face federal action to establish them. Last year, the state board requested and the Legislature authorized 5.4 new positions for the state board to work on the formulation of statewide water quality policy and two positions for the regional boards to handle increased workload, but that augmentation has not yet produced any significant statewide water quality policy. In addition, the regional boards received a budget augmentation of \$265,950, of which \$145,882 was for 16.8 new positions to establish regional water quality standards.

Instead of concentrating on the development of a qualitatively expressed statewide policy, the state board has been concerned primarily with defining water quality terminology and establishing procedures for the regional boards to develop water quality standards for the waters within their jurisdictions. As indicated in the following excerpt from the minutes of the board's January 18, 1967, special meeting, this lack of statewide policy has produced no statewide guides for the regional board to follow in establishing regional water quality objectives.

"Mr. Bonderson stated that this policy had been adopted by the San Francisco Bay Area Regional Water Quality Control Board at its regular meeting on December 15, 1966. He further stated that he believed this policy may have far-reaching effects in the Bay area. . .

"Mr. Osborne suggested that rather than not disapproving regional policies as had heretofore been done, that the State Board should accept and file the policy.

"MOTION: It was moved by Mr. Osborne, seconded by Dr. Breslow, and carried unanimously, that the State Board acknowledges receipt of San Francisco Bay Area Regional Board's Resolution No. 803 for filing in the office of the State Water Quality Control Board.

"Mr. Bonderson again stated that it is his personal feeling that this policy is very far-reaching and pointed out that the document delineates beneficial water uses in San Francisco Bay and that it is a policy statement to maintain essentially bathing standards which will require disinfection and may result in major changes in waste disposal practices within the Bay area. He stated that it was his opinion that the State Board, by taking no action, gives the appearance of concurring to a policy which should be carefully considered by the Board. He further stated that at the present time the State Board is lacking in any policy by which to judge such a policy statement, is limited in its action, and that all the State Board can do is to determine whether such a policy is consistent with State law and State Board policy and whether or not proper procedures had been followed by the Regional Board in adopting the policy. He further stated that the State Board is placed in a position of agreeing with the policy statement without

Water Quality Control Board—Continued

an opportunity to fully explore the facts involved. He stated that he was not suggesting that the State Board take other than the action it had already taken.

"Mrs. Gupta stated that, as she interprets the law, the State Board cannot substitute its judgment for the judgment of the regional boards. . . .

"Mr. Phipps stated that in his opinion the State Board had taken the proper action since it has no authority to disapprove a policy unless the policy was not in agreement with State Board policy."

It is clear from the board's discussion quoted above that the efforts of the regional boards to develop water quality standards within their own regions will reflect the regional board's views exclusively until the state board formulates statewide policy against which the regional policies can be measured.

The total proposed operating budget for the state and regional boards, after an increase of \$139,673 to recognize full workload change, is \$1,455,059. After applying the percentage reduction of 10 percent (amounting to \$145,506), the Budget Bill proposes an appropriation of \$1,309,553 for support of the boards which is close to the existing level. In view of the substantial increase in staff authorized last year which was to cover the duties now before the board, the board should be able to continue with its present staffing level. The problems before the state board do not involve more money but more effective use of the resources presently available.

We recommend disapproval of the workload increase of \$139,673.

STATE WATER QUALITY CONTROL BOARD

ITEM 222 of the Budget Bill

Budget page 782

FOR SUPPORT OF SAN FRANCISCO BAY-DELTA WATER QUALITY STUDY FROM THE GENERAL FUND

Amount requested	\$1,324,800
Estimated to be expended in 1966-67 fiscal year	1,128,387
Increase (17.4 percent)	\$196,413
TOTAL RECOMMENDED REDUCTION	\$196,413

Summary of Recommended Reductions

	Amount	Budget	Page	Line
Limit expenditures to current level	\$196,413	782	45	

ANALYSIS AND RECOMMENDATIONS

Chapter 1351, Statutes of 1965, gave the State Water Quality Control Board the responsibility to study the water quality control problems of the San Francisco Bay and the Sacramento-San Joaquin Delta area. The objective of the study is to prepare a long-range plan for disposal of drainage and waste waters throughout the San Francisco Bay and delta areas.

Last session the Legislature appropriated \$1,078,000 to initiate work on the study. We commented then that many phases of the proposed

Water Quality Control Board—Continued

work appeared to be overbudgeted and emphasized the need for the state board to implement the instructions in Chapter 1351 to secure maximum coordination of the study with other related studies and agencies. The Governor's Budget for next fiscal year requests \$1,324,800 to finance the second year of the study. The second year is the most critical phase of the study and the decisions made by the Legislature with regard to this appropriation request will essentially establish the form and substance of the study.

In approving the first year's funds for the study last session, the Legislature added limiting language to Item 277.5 that each major contract should carry a certification, citing the facts involved in each of the contracts, that optimum coordination with all responsible agencies of government had been accomplished. In spite of this language, a series of contracts were executed which totaled approximately \$800,000 and no facts were cited showing that optimum coordination had occurred. Furthermore, the contracts themselves were merely general and vague documents under which the real work to be done is to be subsequently defined in a series of subordinate task orders. These task orders are not subject to the limiting language of the Budget Act and therefore, the intent of the limiting language was nullified. We have asked the Controller whether the basic contracts meet the requirements of the limiting language of the Budget Act.

Discussions with the staff of the state board make it clear that there was no deliberate intent to circumvent the explicit statutory directive. Instead, the evidence indicates that there was not an understanding that the Legislature was expressing a desire for a positive effort at coordination and cooperation. The staff of the state board merely sought to coordinate its activity where it saw a relationship to the work of other governmental agencies. It did not attempt to seek out the means to secure "optimum coordination" in order that the best possible job could be done at the least possible cost. The staff is now giving more attention to the problems of coordination. As of this writing, however, the necessary coordination has not yet occurred.

A basic assumption in the plan for the Bay-Delta Waste Water Management Study is that the modeling of the bay to solve water quality problems will be done on a digital computer. This overlooks the fact that the Corps of Engineers is now adding the delta to its physical model of San Francisco Bay and that in order to coordinate with Corps of Engineer studies, to meet the possible needs of the Bay Conservation and Development Commission and other agencies, and to determine the effects of changed conditions within the bay on the Golden Gate and conditions immediately outside the Golden Gate, the Corps of Engineers physical model may have advantages. It also overlooks the fact that the Corps of Engineers may be anxious to undertake model studies and to assist in the overall work. We believe that the digital computer model should not be undertaken until it is demonstrated to be superior for all purposes related to present studies of the bay and it is shown to be more economical than the physical model studies of the bay.

Another area of concern is that the state board is spending almost 25 percent of its available funds on state board staff to coordinate and

Water Quality Control Board—Continued

supervise the study. At the same time large amounts of money have been authorized for the private engineering firm which has the principal contract to undertake coordinating and supervisory activities. On top of this, consultants and advisory committees have been appointed consisting of technical personnel who seem to be directing the study activities along their lines of interest and away from the broad coordination and cooperation which the Legislature has directed.

Although the basic contracts have now been let and the task orders are now being written, the entire project is nearly a year behind schedule. It is proposed to make up for delays in getting the work started, many of which were not caused by the state board, by accelerating certain features of the work and doing more work simultaneously instead of in progression as originally planned. This means that some work may be done that will not be needed because it would have been too late to start the work when its need is definitely determined. It also means that the original budget for the study and the schedule on which it was based no longer apply.

The funds included in the budget for next fiscal year are the estimates made a year ago before the delays of last calendar year and the compensating acceleration efforts. There does not exist at this time any means to evaluate the extent of the work now underway or to be placed under contract this fiscal year compared to the requirements for next fiscal year. The state board hopes to have more definite information on the needs for next year's budget by April when the engineering contractor has been able to refine the original schedule for next fiscal year.

Because of the many problems briefly mentioned above, we are unable to make any final recommendation on the funding required for next fiscal year for the San Francisco Bay-Delta Waste Water Management Study and recommend the elimination of the proposed increase for the purpose of suggesting that the Legislature defer consideration of the matter until the state board presents current estimates, when an appropriate final figure may be established.

CALIFORNIA ADVISORY COMMITTEE**ITEM 223 of the Budget Bill**

Budget page 783

**FOR SUPPORT OF THE CALIFORNIA ADVISORY COMMITTEE
FROM THE GENERAL FUND**

Amount requested in Budget Bill -----		\$6,075
Budget request before identified adjustments -----	\$6,750	
Increase to recognize full workload change -----	None	
Budget as adjusted for workload change -----	\$6,750	
Adjustment—undetailed reduction (10 percent) -----	675	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET----- \$675**RECOMMENDED REDUCTION FROM APPROPRIATION
REQUEST ----- None****GENERAL PROGRAM STATEMENT**

The California Advisory Committee was authorized by the Legislature in Chapter 1647, Statutes of 1965. The committee is authorized to

California Advisory Committee—Continued

hold hearings, and provide advice to the Legislature and to the state's members appointed to any interstate organization participating in water planning among the western states. The committee consists of an Assembly member, a Senate member, a member of the California Water Commission, and four members appointed by the Governor.

ANALYSIS AND RECOMMENDATIONS

Fiscal year 1967-68 is the second full year of operation for the California Advisory Committee. Expenditures for the current year are estimated at \$5,000 and the budget bill request for the next fiscal year is \$6,075. The increase is to cover higher estimated travel costs for committee activities.

Since the committee has no paid staff and most of its expenditures are for travel, and the travel cost of legislative committee members is being reduced pursuant to Proposition 1-A, it is reasonable for the committee to absorb a reduction of \$675 in travel for the next fiscal year.

Approval of the budget request is recommended.

Department of Water Resources

CALIFORNIA-NEVADA INTERSTATE COMPACT COMMISSION

ITEM 224 of the Budget Bill

Budget page 786

FOR SUPPORT OF THE CALIFORNIA-NEVADA INTERSTATE
COMPACT COMMISSION FROM THE GENERAL FUND

Amount requested in Budget Bill		\$13,434
Budget request before identified adjustments	\$14,927	
Increase to recognize full workload change	None	
Budget as adjusted for workload change	\$14,927	
Adjustment—undetailed reduction (10 percent)	1,493	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET... Unresolved

BALANCE OF UNDETAILED REDUCTION—REVIEW PENDING \$1,493

GENERAL PROGRAM STATEMENT

The California-Nevada Interstate Compact Commission was established by Chapter 1810, Statutes of 1955, to represent California in negotiating an interstate compact with Nevada covering the distribution and use of the waters of Lake Tahoe and the Carson, Walker, and Truckee Rivers. The California commission is composed of the Director of Water Resources and six members appointed by the Governor who reside, own property, or engage in business in the basins of the Carson, Walker, and Truckee Rivers and Lake Tahoe. The Department of Water Resources provides all engineering, administrative, and clerical services to the commission under an annual agreement. Recent expenditures by the commission are shown below.

Table 1

California-Nevada Interstate Compact Commission—Support Expenditures

Source of funding	1963-64	1964-65	1965-66	1966-67*	1967-68 †
General Fund	\$78,340	\$74,048	\$34,609	\$20,564	\$13,484

* Estimated.

† Appropriation request after 10 percent reduction.

Item 225**San Francisco Bay Conservation and
Development Commission**

California-Nevada Interstate Compact Commission—Continued

ANALYSIS AND RECOMMENDATION

On October 29, 1965, after 10 years of negotiation, the California and Nevada commissions tentatively agreed on a proposed compact covering the Truckee, Carson, and Walker River basins and Lake Tahoe, and submitted this compact to interested agencies for review and comment. During 1967-68, the joint commission will analyze comments on the proposed compact received from federal, state, and local agencies and make such changes in the compact as seem appropriate; present the completed compact to the Legislatures of California and Nevada for ratification; and arrange for the introduction of consent legislation in Congress to obtain federal approval.

The proposed workload budget for the commission is \$14,927. After applying the percentage reduction of 10 percent, the Budget Bill proposes an appropriation of \$13,434 for support of the commission.

**SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION
ITEM 225 of the Budget Bill** Budget page 787**FOR SUPPORT OF THE SAN FRANCISCO BAY
CONSERVATION AND DEVELOPMENT COMMISSION
FROM THE GENERAL FUND**

Amount requested in Budget Bill		\$230,997
Budget request before identified adjustments	\$234,924	
Increase to recognize full workload change	21,739	
Budget as adjusted for workload change	\$256,663	
Adjustment—undetailed reduction (10 percent)	25,666	

RECOMMENDED REDUCTION FROM WORKLOAD BUDGET \$25,666**RECOMMENDED REDUCTION FROM APPROPRIATION
REQUEST** None**GENERAL PROGRAM STATEMENT**

The San Francisco Bay Conservation and Development Commission was established by Chapter 1162, Statutes of 1965. The commission is directed to study all matters relating to filling the tidelands and shoreline areas of San Francisco Bay and to prepare a plan for the development of the shoreline. The statute directs the commission to complete its plan and file a report in January 1969. In the interim period, the commission is authorized to issue permits to regulate filling or excavation of the bay. The commission consists of 27 members representing all levels of government and interests.

ANALYSIS AND RECOMMENDATIONS

During the current fiscal year we have noted carefully the performance of the San Francisco Bay Conservation and Development Commission. The most important objective of the commission is to limit the filling of San Francisco Bay during the time required by the commission to prepare a comprehensive plan for the allowable filling of the bay. The commission appears to be fulfilling this objective well, measured in terms of the limited filling approved to date.

San Francisco Bay Conservation and Development Commission—Continued

Concurrently, the commission is proceeding with the preparation of planning reports from which the commission itself will draw conclusions for use in formulating planning policy for the long-range allowable filling in the San Francisco Bay area. The commission is establishing basic policy using the currently available information while simultaneously developing public understanding of the policy decisions being made. This approach is in sharp contrast to other planning activities of the state in which technical personnel gather large quantities of data, analyze the data and then produce their own conclusions without significant participation and understanding of the public. The commission's approach logically appears to be the preferable way to accomplish fruitful planning, however, it remains to be seen whether the approach will in the long run be as effective as presently appears.

The Bay Conservation and Development Commission has been coordinating its efforts with other state and local units of government in a satisfactory manner based on presently available evidence. However, the broad policy approach of the commission may present difficulties in coordinating its work with the activities of the San Francisco Bay-Delta Waste Water Management Study being conducted by the State Water Quality Control Board. The latter study, while necessarily required to be concerned with engineering and technical considerations, appears to be developing along the lines of a much more detailed study than the work of the Bay Conservation and Development Commission. It is not clear now how the two investigations can be satisfactorily coordinated and joined to produce a harmonious end product, which is essential if both investigations are to be successful. As of this time there is no significant coordination by the two studies on questions of water quality. Furthermore, the progress of the commission when coupled with the delays in initiating the San Francisco Bay-Delta Waste Water Management Study, may result in additional timing problems in coordinating the water quality work of the two studies.

The budget for the commission to continue its work in the next fiscal year is approximately \$231,000 after allowing for a workload increase of \$21,739 and a 10 percent reduction of \$25,666. The net appropriation for next fiscal year is, therefore, approximately \$12,000 less than the commission's expenditures for the current year which is its first full year of activity. Since the commission is operating on a small budget and is confronted with a fixed date of January 1969 for the completion of its work, it is unable to defer activities or to make significant reductions in its expenditure level. This does not mean that minor economies and adjustments cannot be made by the commission in its printing and other operations. It therefore appears that a reduction of \$12,000 in the commission's budget would not be sufficiently great to impair the commission's operations significantly.

It is recommended that the Legislature approve the appropriation request for the commission after thoroughly reviewing its relationship to other San Francisco Bay investigations such as the San Francisco Bay-Delta Waste Water Management Study in order to assure that maximum integration of effort is being achieved.