

## Item 171

## Fish and Game

## Deficiency Payments—Continued

tures were the maximum allowed in two of the years and zero in two of the years as shown in the following table.

Deficiency Authorizations					
	Salaries and wages	Operating expenses	Equipment	Capital outlay and minor construction	Total
1952-53 Fiscal Year:					
E. O. D53-17—Registration work load increase -----	\$60,514	--	--	--	\$60,514
E. O. D53-28—Registration work load increase -----	16,745	--	--	--	16,745
E. O. D53-82—Deficits in estimated salary savings --	122,741	--	--	--	122,741
Total -----	\$200,000				\$200,000
1953-54 Fiscal Year -----	--	--	--	--	—0—
1954-55 Fiscal Year -----	--	--	--	--	—0—
1955-56 Fiscal Year:					
E. O. D55-89—Newly created Calif. Reciprocity Commission -----	\$4,603	\$2,400	\$605	--	\$7,608
E. O. D55-105—Registration work load increase -----	29,953	--	7,299	--	37,252
* E. O. D55-109—Fire damage--	--	--	--	\$9,725	9,725
* E. O. D55-108—Fire damage--	--	8,500	22,911	--	31,411
* E. O. D56-60—Fire damage--	8,636	4,811	193	--	13,640
E. O. D56-84—Price increase--	--	--	--	364	364
Total -----	\$43,192	\$15,711	\$31,008	\$10,089	\$100,000
1956-57 Fiscal Year:					
Budget Revision No. 5 (pending) Registration and drivers license work load increases -----	\$80,547	\$14,437	--	--	\$94,984

\* Warehouse fire—October 12, 1955.

We recommend that this item be reduced \$150,000 to the \$100,000 amount made available for the past three fiscal years.

## DEPARTMENT OF FISH AND GAME

ITEM 171 of the Budget Bill

Budget page 690

Budget line No. 62

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

Amount requested -----	\$7,741,825
Estimated to be expended in 1956-57 Fiscal Year -----	7,943,973
Decrease (2.5 percent) -----	\$202,148

## Summary of Increase

	Total increase	INCREASE DUE TO		Budget Line page No.
		Work load or salary adjustments	New services	
Salaries and wages -----	\$63,914	\$63,914	--	714 8
Operating expense -----	—180,049	—180,049	--	714 9
Equipment -----	—98,037	—98,037	--	714 10
Plus: decreased reimbursements--	12,024	12,024	--	714 34
Total increase -----	—\$202,148	—\$202,148	--	714 36

## Department of Fish and Game—Continued

## RECOMMENDATIONS

Amount budgeted .....	\$7,741,825
Legislative Auditor's recommendation .....	7,446,862
Reduction .....	\$294,963

## Summary of Recommended Reductions

<i>Function</i>	<i>Salary</i>	<i>Operating expense</i>	<i>Budget Page</i>	<i>Line</i>
Game management				
Staff operations				
(1) Fish and game assistant .....	\$4,296	\$387	694	17
Region I:				
Game farm operation .....	---	8,999	699	82
(1) Game manager I .....	5,232	---	699	44
(1) Fish and game assistant .....	4,296	---	699	51
(9) Man-months seasonal aid .....	2,250	---	699	51
Predator control .....	---	4,769	699	82
(4) Fish and game assistant .....	17,184	---	699	49
Region II:				
Game farm operation .....	---	22,206	703	25
(3) Game manager I .....	15,264	---	702	61
(6) Fish and game assistant .....	24,636	---	702	62
(21) Man-months seasonal aid .....	5,250	---	702	69
Predator control .....	---	8,346	703	25
(6) Fish and game assistant .....	25,776	---	702	67
(1) Lion hunter .....	3,900	---	702	68
Region III:				
Game farm operation .....	---	25,178	706	24
(1) Game manager II .....	6,060	---	705	70
(2) Game manager I .....	10,464	---	705	71
(9) Fish and game assistant .....	37,645	---	705	72
(40) Man-months seasonal aid .....	10,000	---	705	77
Predator control .....	---	4,771	706	24
(3) Fish and game assistant .....	12,888	---	705	75
(1) Lion hunter .....	3,900	---	705	76
Region IV:				
Predator control .....	---	5,960	709	44
(4) Fish and game assistant .....	17,184	---	709	9
(1) Lion hunter .....	3,900	---	709	10
Region V:				
Predator control .....	---	8,348	712	73
(7) Fish and game assistant .....	28,874	---	712	40
Total recommended reduction .....	\$238,999	\$88,964	690	17
Recommended augmentation				
Staff operations:				
Operating expenses:				
Predation control contract service from U. S. Fish and Wildlife .....		\$33,000		
Total recommended reduction .....		\$327,963		
Recommended augmentation .....		33,000		
Net total reduction .....		\$294,963		

## GENERAL SUMMARY

The Department of Fish and Game as directed by Chapter 715 of the Statutes of 1951 is responsible for the administrative implementation of policies established by the Fish and Game Commission and by legis-

**Department of Fish and Game—Continued**

lation. The scope of activities of the department includes research, development, and control of fish and game natural habitat for optimum sustained yield; propagation and controlled release of certain species of fish and game; recommendations to the commission and to the Legislature for regulations compatible with current field conditions, and patrol to insure enforcement thereof. The department accomplishes these basic objectives primarily through its five regional offices and the Marine Fisheries' coastwide organization.

**Table A. Table of Increases 1947-48 to 1956-57**

	1947-48	1956-57	Percent increase
Work index:			
License buyers .....	1,392,299	2,088,000	49.9
Number of employees .....	523	989	89.1
Total revenue .....	\$4,184,052	\$7,517,430	79.6
Total expenditures .....	\$3,677,324	\$8,733,180	137.4

**Table B. Table of Increases During Departmental Status 1952-53 to 1956-57**

	1952-53	1956-57	Percent increase
Work index:			
License buyers .....	1,687,361	2,088,000	23.7
Number of employees .....	832	989	18.8
Total revenue .....	\$6,282,445	\$7,517,430	19.6
Total expenditures .....	\$6,543,093	\$8,733,180	33.4

The action taken by the Legislature in the Fiscal Year 1951-52 in establishing the Department of Fish and Game necessarily increased the cost of administering the agency over that previously experienced when the agency was a division within the Department of Natural Resources, at which time the administration and fiscal management were integrated with the activities of the other units of that department.

It is difficult to itemize a comprehensive work index which would apply to the over-all operation of the department. Activities of the department have increased tremendously, necessitating a corresponding increase in expenditures without realizing associated revenues to defray them. Such administrative activities include (1) an increase in major water development projects, (2) an increase from 70 miles of rough fish stream treatment in 1948 to 301 miles in the last fiscal year, (3) deer range improvement which increased from no acreage in 1948 to 6,097 acres in the last fiscal year, and (4) many more facilities for hunting and increased hatchery production which were made available to the sportsman. However, since the most expensive departmental programs are geared for the most part to sportsmen's needs, we have used license sales as the most consistent work index.

The department has increased in size and scope of operations over the past 10 years in such a manner that present duties and responsibilities of individual personnel bear little resemblance to the duties performed by these positions at the time the existing organization was first established. For instance, game management personnel originally vested with responsibilities of habitat development, predator control,

## Department of Fish and Game—Continued

game refuge and other wildlife management work concerned primarily with game conservation, have now had their duties expanded to include game farms, waterfowl management areas, special hunts and hunting areas. The current duties of fisheries management personnel reflect the much expanded catchable trout program and a major shift toward fish rescue and maximum habitat maintenance and development made necessary by the accelerated state water conservation measures in progress. Collectively, the increase in programing and scope of the department have greatly expanded demands on the wildlife protection branch, representing the only segment of the organization whose primary duty of law enforcement has not been materially altered. This transition in departmental objectives and integrated functions has tended to increase the importance of some position categories and minimize that of others. The department has not fully adjusted to this present situation as this analysis will point out.

Although the department proposes a decrease in expenditures for the budget year, this decrease has little effect on the condition of the Fish and Game Preservation Fund, which has been operating at a deficit since the 1951-52 Fiscal Year. In the face of this deficit spending, new programs and additional facilities have been added, which factors, coupled with an increase in costs of operation, have tended to accelerate the depletion of the fund. The condition of the Fish and Game Preservation Fund is shown in the following table:

<i>Fiscal year</i>	<i>Annual operating surplus or deficit</i>	<i>Fund surplus balance</i>
1950-51	+\$483,163	\$6,124,499
1951-52	—339,645	5,784,854
1952-53	—260,648	5,524,206
1953-54	—152,654	5,371,542
1954-55	—75,938	5,295,604
1955-56	—465,538	4,830,066
1956-57 (Est.)	—2,093,327	2,736,739
1957-58 (Est.)	—1,277,019	1,459,720

The budget request for the department proposes no increase in the level of service and in many instances is not providing for an anticipated work load increase resulting from the State's population expansion. Nevertheless, the existing complement of manpower and projects will have consumed the dwindling surplus before the close of Fiscal Year 1958-59 unless provision is made to increase the departmental income, or reduce expenditures.

In our opinion, the problem of the prospective deficit requires that programing be critically reviewed for the possibility of eliminating those projects and installations which are uneconomical, unnecessary, or obsolete in character in order to pare the operation down to a realistic base, and a full study of the department's present and foreseeable future needs should be initiated to provide for support of the residual programs.

It is our opinion that the departmental status of fish and game has not completely cured the ills which instigated that change, nor has

## Department of Fish and Game—Continued

the scope of the department's activities justified the added expense experienced. Like other natural resources agencies, fish and game is an integral part of the State's over-all conservation and recreation picture and its activities must be coordinated and correlated with those of other such agencies in order to develop an orderly pattern of economic utilization and public enjoyment. The economy of operation anticipated in departmentalizing fish and game did not materialize. In fact, the opposite has been the case. Further, difficulties which had been experienced by vesting administrative responsibilities in the Fish and Game Commission were not completely resolved in the reorganization. The Attorney General's opinion No. 56-33, March 30, 1956, interpreted those authorities remaining to the commission as including budgetary control of the department. This, in our opinion, indicates that a major administrative responsibility, which was presumed to rest with the department, is actually retained by the commission. Because of the obvious benefits which would accrue to the State if the Department of Fish and Game were again relegated to a divisional status within the Department of Natural Resources with complete administrative control vested in the director, with resulting benefits in further correlating the State's recreation and conservation programs, we believe that in any comprehensive reorganization to provide better coordination of recreational activities, consideration should be given to returning the fish and game activities of the State to the jurisdiction of the Department of Natural Resources. By this step, we believe that savings would be effected in the fiscal and administrative management operations of this agency. In our analysis we have outlined other programs specifically related to functions which we feel should be implemented to effect further savings.

The last increase in license fees to the sportsmen was enacted in 1947 and took effect in 1948. Since that date new programs beneficial to the sportsmen as well as to conservation have been effected, salaries of state employees have increased, and costs of materials, supplies and equipment have increased. In 1948, the department spent \$2.64 per sportsman while in 1956 it spent \$5.19 per sportsman. In other words, the expenditure per sportsman increased 97 percent in eight years, while the revenue realized per sportsman to defray these expenditures increased only 20 percent.

The present departmental expenditure of \$5.19 per sportsman compares with an average of \$7.28 per sportsman spent by the 10 western states. Also, expenditures of \$9,246 by the State per employee of the department compares with \$10,774 average per employee of the 10 western states. The average number of sportsmen per fish and game employee in the 10 western states is 1,484, while in California there are 1,781 sportsmen per employee.

The following table further illustrates California's statistics in comparison with the individual and the over-all average of 10 western states.

## Department of Fish and Game—Continued

<i>State</i>	<i>Budget</i>	<i>Employees</i>	<i>Budget per employee</i>	<i>Sportsmen</i>	<i>Budget per sportsman</i>	<i>Sportsmen per employee</i>
Arizona -----	\$1,373,121	140	\$9,808	174,800	\$7.85	1,242
Colorado -----	3,441,938	349	9,862	515,405	6.68	1,476
Idaho -----	1,971,770	189	10,432	242,679	8.12	1,284
Montana -----	1,793,201	220	8,151	313,659	5.71	1,426
Nevada -----	1,040,000	80	13,000	95,500	11.00	1,194
New Mexico --	1,515,372	154	9,840	178,258	8.50	1,157
Oregon -----	4,512,032	332	13,590	606,553	7.43	1,827
Utah -----	1,828,895	169	10,822	306,529	5.97	1,814
Washington ---	4,155,000	470	8,840	670,307	6.20	1,426
Wyoming -----	2,644,075	150	16,950	231,186	11.43	1,541
Totals -----	\$24,275,404	2,253	--	3,334,876	--	--
Average --	\$2,427,540	225	\$10,774	333,487	\$7.28	1,484
California ----	\$10,568,257	1,143	\$9,246	2,036,000	\$5.19	1,781

At the present time, pursuant to the provisions of Section 407 of the Fish and Game Code, license agents receive 5 percent of their total license sales as a commission, presumably to defray the cost of issuing the licenses. At the present level of license sales, it is anticipated that the department will reimburse the license agents a total of \$342,000. We wish to stress here the import of remarks and excerpts from previous reports, statements, and unsuccessful legislation designed to eliminate the 5 percent commission paid to license agents. The findings of committees, studies, and informal field contacts have pointed out that payment of the commission is more a benevolent departmental gesture than a necessity. The primary argument for retaining this practice centers around a very small percentage of the agents who maintain that their businesses would "fold" if the commission were discontinued. Since the department requires certain evidence of continuing business before establishing an agent and since many license agents have stated that the availability of licenses in their establishments serves as an augmentation of, rather than, a detriment to their income, it is unlikely that their business would be either impaired by the discontinuance of the commission or appreciably enhanced by continuing it. This office has repeatedly maintained that for the department to operate economically and on a sound business basis, the agent commission should be discontinued. This action would, to a great extent, alleviate the drain on the accumulated surplus, and provide funds which could be used to a greater advantage in providing increased services to the sportsman or to defray any latent expense such as flood damage or repair not normally incurred. We therefore again recommend that provision for the agent commission be deleted from the code, thus enhancing the Fish and Game Fund by the amount normally reimbursed to the agents.

In considering the fiscal phase of fish and game, the activities of the Wildlife Conservation Board cannot be ignored. Accruing annually to the Wildlife Restoration Fund for expenditure by the board is \$750,000 from license fees for horse race meetings which would otherwise go to the General Fund. In effect, this is a General Fund contribution to

**Department of Fish and Game—Continued**

fish and game conservation and preservation. The board expends its money for capital outlay projects of property acquisition, improvements, repairs and equipment on particular projects, pursuant to the intent of the Legislature prescribed in the Wildlife Conservation Act of 1947. Although the department is not assessed for the construction of these facilities, nevertheless it feels the strain of the support expenditures needed for their operation and maintenance when it assumes responsibility. The over-all fish and game program has materially benefited from the board expenditures. The board has been aware of the impact of projects on ultimate support costs and more recently has been pursuing primarily projects such as fishing access areas and warm water fish programs which do not incur increased operating expenses to be defrayed by the department. However, we would recommend that legislation be enacted to curtail projects of the Wildlife Conservation Board to such measures which improve conservation or recreation but which would not require a drain on the Fish and Game Preservation Fund for those projects' continuance unless so sanctioned by the Legislature by special act. The department could then anticipate its needs with much greater accuracy and could operate with more effective planning.

**ANALYSIS**

The Department of Fish and Game proposes a decrease in the support budget of \$202,148 or 2.6 percent from \$7,943,973 estimated to be expended in the current fiscal year to \$7,741,825 for the budget year. (Budget page 690, line 26.) This decrease does not reflect a corresponding decrease in the level of services but rather is due to nonrecurring items such as special safety maintenance performed in the current fiscal year in the amount of \$40,000, flood damage repairs of \$24,000 and \$93,000 allotted for the refurbishing of a boat to replace the marine vessel *Yellowfin*; also to the closing of certain installations which have proven uneconomical to operate although such closures do not reduce the over-all fish and game output. Inland fisheries facilities discontinued and in the process of being dismantled are Prairie Creek, Tahoe, and Yosemite hatcheries and the Eastside Rearing Reservoir, and game management installations discontinued by consolidation with other existing installations are Valley Center and Castaic Game Farms consolidated with Los Serranos at Chino; also Porterville and Bakersfield game farms were consolidated with the Fresno game farm.

**Fish and Game Commission**

The commission serves as a policy making and advisory body to the department and also acts as a "sounding board" for sportmen's complaints and suggestions to aid in the development of programing. In the current year, following an Attorney General's ruling interpreting such authority as commensurate with its responsibility, the commission has assumed an active role in the formulation of the department's 1957-58 Budget. This was made a key issue on the commission's agenda

**Department of Fish and Game—Continued**

and as a result the departmental proposal was afforded more general publicity and distribution than it has experienced in the immediately preceding years.

The proposed commission expenditures (budget page 692, line 39) for 1957-58 of \$39,140, indicates a decrease of \$742 from the \$39,882 estimated to be expended in the current fiscal year, which decrease is reflected in the request for out-of-state travel, primarily attributable to the fact that meetings during the budget year will be held nearer to California with commensurate savings.

We recommend approval of the commission's budget as proposed.

**Administration**

The Departmental Administration Section (budget page 692) provides executive direction and over-all business housekeeping functions for the department. It is proposed to increase this cost by 2 percent from \$556,499 estimated to be expended in the current fiscal year to \$567,701 for the budget year. Of the \$11,202 increase, normal salary adjustments account for \$6,837 and pro rata general administrative charges for most of the remainder. As is found throughout the budget the same level of service for administration is proposed and we recommend approval as budgeted. Should the Legislature determine it advisable to return the Department of Fish and Game to a division status in the Department of Natural Resources, as mentioned, the administration section will be materially affected, resulting in savings from its fusion with the Division of Administration of the Department of Natural Resources.

**Staff Operations**

This unit (budget page 693), which provides field direction and coordinating supervision to the functional counterparts in the regions, is requesting \$277,198, thereby proposing to decrease its expenditure by \$41,610, representing a 14 percent decrease from the estimated expenditures of the current year of \$318,808. This Budget still provides the same level of service, the decrease being attributable to the \$40,000 special safety maintenance item appearing in the current budget which is not recurrent.

It is the recommendation of this office under the analysis of "Regional Operations—Game Management," that certain adjustments be made in outlay for predator control. To insure such control on bird nesting areas it is recommended that an item for \$33,000 be included as an augmentation to the staff operations budget for contract service with the Fish and Wildlife Service.

With the inclusion of this item, we recommend approval of a budget of \$310,198 for staff operations.

**Conservation Education**

This section (budget page 695) is vested with the responsibility of disseminating information to the public on the status and problems of wildlife by printed and visual means. By far the greatest expenditure anticipated by this unit is for printing, spread primarily through the



**Department of Fish and Game—Continued**

following three categories: (1) sportsman services—\$38,425; (2) technical reports and bulletins—\$22,125; (3) compilation of laws, rules, regulations, etc.—\$34,900, for a total of these three items of \$95,450.

The Legislature sanctioned a program involving the development of a series of educational films on the various phases of wildlife management. This section has estimated that the viewers of its films approximate 1,145,000 in 1955, over 1,000,000 of whom represent television viewers. The Fish and Game film library numbers 58 films on seven different wildlife interests and 13 films specially designed for hunter safety training. The agency is requesting \$5,000 for the budget year to produce a film for demonstrating logging practices designed to preserve and protect the essential spawning streams for anadromous fish. We feel that this is a desirable project, providing all state agencies concerned agree on the planned approach.

The training officer originally assigned to the Conservation Education Unit has been transferred during the current fiscal year to the Personnel Section of the Administration Unit. This is a logical move; however, we feel that there is a phase of training which has been overlooked or is lacking in emphasis. It is our opinion that before the department can expect any measure of acceptance for its programing, it must first thoroughly sell its own employees on such steps. As we have previously pointed out, one of the department's failings and perhaps the crux of many of its problems is the lack of public acceptance of many of the department's policies. The agency has in its employment, personnel versed in specific phases of wild life management who make recommendations following a period of field investigations. Quite often these recommendations are nullified by commission action or public disapproval and many times policies enacted as a result of such investigations result in violent public criticism. There is evidence to substantiate that in many cases the disapproval stems from the opinions of some departmental field personnel who are in constant contact with the public. Many of the contested policies have been successfully practiced in other states, and it is imperative that the department should thoroughly acquaint its own personnel of all functions with the reasons for each policy so that maximum benefits can be realized from field employees' support for those programs which are approved.

This unit is requesting \$177,162 for the budget year, a decrease of \$4,099, primarily in visual aids, from the \$181,261 estimated to be expended in the current fiscal year. We recommend approval of the budget for conservation education as proposed, but further recommend that moneys allotted for certain phases of printing be diverted to employee indoctrination in departmental programing and that more time from radio and television, and space from newspapers be solicited to thoroughly acquaint the public with proposed programs and justifications therefor.

## Department of Fish and Game—Continued

## Marine Fisheries

This branch of the departmental organization (Budget page 696) is primarily concerned with research on Pacific Ocean fish to aid in the management for sustained yield of the marine fisheries. This program is of vital concern to the economy of the State, having a direct effect on the commercial as well as sport fisheries. As a result of continuing investigation by this branch, legislative control is enacted over fisheries needing management. The fishing industry is one of the major industries utilizing the natural resources in and adjoining the State but it is the only one of these major industries which does not receive support from the General Fund. However, special taxes, licenses and miscellaneous fees levied on the commercial interests provide approximately \$600,000 per year with the \$200,000 balance of the support costs defrayed by sportsmen's licenses. Since it is anticipated that angling licensing revenues will approach \$4,200,000 it is the opinion of this office that \$200,000 is little enough in considering the benefits afforded the sport coastal fishermen by the Marine Fisheries Branch.

Specific benefits to the salt water sport fishermen as a result of applied research include screens and fishways to insure propagation and unobstructed seaward migration of anadromous fish and the highly successful new Salton Sea fishery. Legislative control measures are initiated as a result of Marine Fisheries research sustaining such important sport fisheries as salmon, kelp bass, albacore, yellowtail, bottom fish, surf fish, clams, abalone and crab, as well as anchovy and herring for attracting and keeping other fish in local waters. Other legislative regulations controlling seismic operations, kelp and pollution result primarily from Marine Fisheries investigations. To enforce these regulations to the benefit of both sport and commercial fishing, 13 boats and 50 wardens, or approximately one-fourth of the State's warden force patrol the coastal waters. Of the approximate total amount of \$1,800,000 expended on marine research and patrol activities, the commercial and sport fishermen support the program and exceed its cost by approximately \$300,000.

Marine Fisheries proposes to expend \$815,255, representing a decrease of \$60,040, or 7.4 percent from the estimated expenditure of \$875,295 of the current fiscal year. The decrease is reflected in boat operations, since the marine vessel *Yellowfin* was taken out of service for unseaworthiness in September, 1956, and \$93,000 was allotted to recondition the ship *Alaska* to replace it. As previously mentioned, this \$93,000 will not be a recurring item in the budget year and since the Marine Fisheries Budget represents basically the same level of service which we do not at this time feel is excessive, we recommend approval of the budget for this unit as submitted.

## Regional Operations

The Governor's Budget presents the operations of each region in detail. However, to more clearly present the budget outlay proposed by function, this analysis will combine the functional operations of all five regions with any references to specific regions denoted by budget page and line number.

## Department of Fish and Game—Continued

## Headquarters

This segment of the regional operation includes the supervisorial units of each function, that is, regional manager, business management, wild life protection, game management and inland fisheries management.

The combined headquarters operation of all five regions, proposes a small increase of \$1,764 from the estimated expenditure of \$459,107 for the current fiscal year to that of \$460,871 for the budget year (Budget, page 690, line 18). Normal merit salary increases coupled with decreases in nonrecurring operating expenses evolve the net increase figure. We therefore recommend approval as submitted.

## Inland Fisheries

The activities of the Inland Fisheries operations are concentrated on hatcheries, stream improvement and fisheries investigations. As previously mentioned, the department intends to close four units, the Prairie Creek Hatchery in Region 1, the Tahoe Hatchery in Region 2, the Eastside Rearing Reservoir in Region 3, and the Yosemite Hatchery in Region 4 on the basis of the uneconomical operation experienced.

It is interesting to note that the hatcheries in 1948-49 produced 464,371 pounds of fish as compared with the present total of over 1,300,000 pounds and included in these figures were only 1,116,201 catchable size trout which were planted in 1948-49 and approximately 7,800,000 planted in the current year. Through research and management the department has found that the roadside fingerling fish planting that absorbed a great deal of the activity in earlier years is not practicable because of the number of fish lost due to various reasons, and that the planting of catchable trout better answers the sportsman demand, with fingerling planting primarily concentrated in the high lakes. The production of fish has increased from 4,011 pounds per employee in 1948-49 to 9,190 pounds per employee in Fiscal Year 1954-55. This increased production was attained with an increase of 26½ employees.

The Inland Fisheries function of the five regions combined proposes to expend \$1,912,274, a decrease of \$61,004 or 3 percent from the current year's estimated expenditure of \$1,973,278 (Budget page 690, line 19). The advisability of continuing the Fillmore Hatchery might be questioned inasmuch as major improvements must be made on the water system there for effective operation, but since the loss of the fairly large production of some 80,899 pounds at this hatchery, as well as a loss of this convenient planting base, would require additional expenditures elsewhere to compensate, it is doubtful if much can be saved by its discontinuance.

It is anticipated that there will be an increased, rather than decreased demand on the Inland Fisheries production facilities because of the many new and planned reservoirs resulting from the state as well as local water development programs. Such programs have evolved excellent fishing potentials such as the lakes suitable for a warm-water fishery including Folsom, Avocado, Pine Flat, Isabella, Los Banos Ponds,

## Department of Fish and Game—Continued

personnel as well as many others on special field projects represent an excellent field coverage which could greatly enhance the patrol effectiveness. The regularly assigned warden could prepare and present all cases and serve as a training medium for the fish and game personnel in his assigned area. Since the patrol function is recognized as a vital as well as one of the most costly programs in the department, we feel that action taken as outlined would afford a more complete approach to the objectives of conservation and safety.

The combined regional wildlife protection function proposes to expend \$2,222,181 in the budget year, representing a reduction of \$31,316, or 1.4 percent from the \$2,253,497 estimated to be expended in the current fiscal year (Budget page 690, line 21). The reduction is primarily reflected in the nonrecurring items expended in the current fiscal year to implement the 36 new warden positions authorized by the Legislature in the 1956 Budget Session. Since the same level of service is indicated in the 1957-58 Fiscal Year, we recommend approval of the regional wildlife protection budget as presented.

## Department of Fish and Game

## GAME MANAGEMENT IN COOPERATION WITH THE FEDERAL GOVERNMENT

ITEM 172 of the Budget Bill

Budget page 691

Budget line No. 9

FOR SUPPORT OF GAME MANAGEMENT IN COOPERATION WITH THE  
FEDERAL GOVERNMENT AS PROVIDED BY THE PITTMAN-ROBERTSON  
ACT FROM THE FISH AND GAME PRESERVATION FUND

Amount requested .....	\$280,274
Estimated to be expended in 1956-57 Fiscal Year .....	278,604
Increase (0.6 percent) .....	\$1,670

## RECOMMENDATIONS

Amount budgeted .....	\$280,274
Legislative Auditor's recommendation .....	280,274
Reduction .....	None

## GENERAL SUMMARY

The Federal Government authorized a program of financial assistance in state projects for wildlife restoration pursuant to the provisions of the "Federal Aid in Wildlife Restoration Act," or as it is more popularly known, the Pittman-Robertson Act. This program was effected in 1937 and California first availed itself of the opportunity to participate in 1940. Since that date there has been a federal-state participation in 50 projects, of which 18 were developmental in nature,

**Game Management—Federal Government Cooperative—Continued**

24 research, six for acquisition of refuge or management areas, one for maintenance of upland game developments, and one a continuing coordination project. The Pittman-Robertson program provides that on projects classified as applicable to the provisions of the act, the Federal Government will defray 75 percent of the costs of the projects, the State providing the remainder.

**ANALYSIS**

The department proposes to expend \$280,274, representing 25 percent of the total program, in the budget year, which exceeds the estimated \$278,604 to be expended in the current fiscal year by \$1,670.

At the present time, there are 15 active projects, seven of which are for research, seven developmental and one coordinating, involving a total outlay of \$1,163,120. Federal aid regulations permit the use of 25 percent of the amount apportioned to the State for maintenance of completed projects or projects under development. The department has never availed itself of the maximum maintenance apportionment allowable under the law, and during the current fiscal year it is estimated that total allocation for maintenance will approach \$118,562, or 10 percent, with the proposed maintenance expenditure for the budget year estimated at \$118,750, or approximately the same percentage level as the current year.

We feel that the department is not justified in failing to avail itself of the full percentage of maintenance allowed by federal law. There are also many activities acceptable to the Federal Government as qualifying for management appropriations for federal aid. Public Law 375, which was approved on August 12, 1955, amended the Pittman-Robertson Act to allow up to 30 percent of the total appropriations available to be expended for management activities. It is true that if full advantage were taken of the 25 percent available for maintenance and 30 percent available for management, only 45 percent would remain for other projects of research and development. However, in considering the critical condition of the Fish and Game Preservation Fund which has been absorbing activities acceptable under the federal aid program, it is recommended that the department be requested to submit a revised budget based upon taking full advantage immediately of the maintenance and management percentages applicable to federal funds available to it.

**Department of Fish and Game****FISHERIES MANAGEMENT IN COOPERATION WITH THE FEDERAL GOVERNMENT**

ITEM 173 of the Budget Bill

Budget page 691

Budget line No. 18

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

Amount requested .....	\$83,115
Estimated to be expended in 1956-57 Fiscal Year .....	80,599
Increase (3.1 percent) .....	\$2,516

**Fisheries Management—Federal Government Cooperative—Continued  
RECOMMENDATIONS**

Amount budgeted .....	\$83,115
Legislative Auditor's recommendation .....	83,115
Reduction .....	None

The Federal-Aid Fisheries Management program was implemented by the Federal Aid in Fish Restoration or Dingell-Johnson Act in 1950. California began its participation in the program in Fiscal Year 1951-52, and since that date, 14 projects have been initiated, 12 of which have been research in nature, one developmental and one continuing coordination. Of the projects engaged in, five have been terminated, and of the remainder, the following is a brief status report showing proposed total project expenditures on each for Fiscal Year 1957-58:

**F-4-D—Stream and Lake Improvement**

This project is a continuing one, begun March 1, 1952, and subsequently renewed after three years showing expanded budgeting each fiscal year as increasing federal funds were made available to the State (\$68,600).

**F-6-C—Fish Management Coordination**

This project, involving four positions, will continue as long as the scope of the Dingell-Johnson program does not experience a substantial decrease (\$26,300).

**F-1-R—Yellowtail Study**

This project will continue at a slightly reduced level in the remainder of the current fiscal year and will terminate during the budget year. The budget for the 1957-58 Fiscal Year proposes the transfer of personnel and funds of this project at its completion to a new barracuda and sea bass study (present project \$17,250) (proposed project \$5,750).

**F-5-R—Surf Fishing Investigation**

This study is also to be terminated during the 1957-58 Fiscal Year, with its present complement of manpower proposed for assignment at that time to a "Rocky Shore Marine Sport Fishery" study (present project \$16,500) (proposed project \$5,500).

**F-12-R—Ocean Salmon Study**

In the budget year it is proposed to expand this study to include other sport fish species, especially from Santa Barbara north. This will necessarily involve an increase in personnel in the first year of such expansion to secure the necessary formative data, with a subsequent leveling off of expenditures (\$39,500).

**F-7-R—Sacramento-San Joaquin River Salmon and Steelhead Study**

This project represents one of the largest inland fishery research programs in which the department is engaged. It will continue at about the same level during the budget year and is to be terminated at the close of the 1958-59 Fiscal Year (\$53,000).

**Fisheries Management—Federal Government Cooperative—Continued****F-8-R—Trout Management Study**

This project is the largest of all fisheries management, federal aid projects, with no foreseeable termination date; however, there will be continual phase emphasis changes to insure a complete field management study (\$81,700).

**F-9-R—A Study of Sturgeon and Striped Bass**

This study is to be continued for several more years, having first been scheduled to terminate in 1957 (\$22,800).

**F-10-R—Coastal Streams Anadromous Trout and Salmon Study**

This project is a relatively new one to determine the feasibility of rearing and releasing anadromous fish. The Cedar Creek hatchery was initiated under this program and the study is to be continued for several years (\$39,500).

In addition to the projects mentioned, the department is proposing the initiation of a warm water forage fish study for the budget year (\$4,000).

Through June 30, 1956, \$816,350 had been expended on Dingell-Johnson projects with 25 percent of the expenditure directed toward marine fisheries studies and 75 percent on inland fisheries projects.

Those projects enumerated above which are concerned with various marine fisheries have been initiated to provide the basic knowledge of fishing pressures and life history data needed to determine the necessity for fish management or control and, if it is determined that management is necessary, to provide recommendations for applicable legislative and mechanical processes to aid in the rehabilitation of these important sport and commercial marine fisheries.

The inland fishery investigations have as their goal the increase of the yield of various sport fish species through restoration and improvement of their environment. Results of investigations which produce logical management procedures in this phase of the Dingell-Johnson program can be utilized in the inland fisheries management supported through approved departmental operations.

The availability of federal funds has undoubtedly provided impetus to the programs enumerated. However, without this federal support, it is still logical to assume that certain aspects of these investigations would be integrated into normal support operations, inasmuch as the need for the knowledge obtained thereby is recognized by both the sport and commercial interests as the primary basis upon which beneficial controls can be initiated.

Since the developmental projects have been quite limited in the Dingell-Johnson program, obviously only a very small amount can be justified for federal aid on maintenance. Nevertheless, as in the Pittman-Robertson program, there are certain printing costs which qualify for federal aid but which are being absorbed in the support budget. It is recommended that the department make a thorough survey of all phases of departmental activities which could be classified as acceptable for Dingell-Johnson programing. Even though some research project

**Fisheries Management—Federal Government Cooperative—Continued**

may be lessened in scope because of a ceiling of activity afforded by availability of federal funds, the critical condition of the Fish and Game Preservation Fund makes it imperative that such action be taken.

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

ITEM 174 of the Budget Bill

Budget page 691  
Budget line No. 29

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

Amount requested -----	\$17,900
Estimated to be expended in 1956-57 Fiscal Year -----	17,900

Increase -----	None
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**RECOMMENDATIONS**

Amount budgeted -----	\$17,900
Legislative Auditor's recommendation -----	17,900

Reduction -----	None
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To bring about cooperation between the States of Washington, Oregon, and California for the conservation and management of the offshore fisheries, the Pacific Marine Fisheries Commission was created in 1947. The responsibility of developing interstate cooperation and coordination in the research and regulation of these fisheries of common interest to the citizens of the member states comprises the primary responsibility of the commission. It is an investigating and coordinating body only, having no regulatory powers. However, it has the authority and implied obligation to submit specific recommendations to the three states involved.

On the basis of priority, the commission undertook research programs relative to ocean salmon, bottom fish and albacore fish. Subsequent cooperation has been afforded the commission by the Alaska Department of Fisheries, U. S. Fish and Wildlife Service and the Fisheries Research Board of Canada, extending the coastwise range of the various research projects. Specific recommendations have been made by the commission, including those relative to the chinook and silver salmon, tuna, sardine, sablefish (black cod), the otter trawl fishery and pollution research.

It is proposed to continue this commission's activities with an expenditure of \$17,900 in the budget year, which is the same amount expended during the current fiscal year. This represents California's share of the total program of \$25,000. The percentage of each member state's contribution is based on the value of the respective commercial catches.

We recommend approval as budgeted.



**Department of Fish and Game**  
**KELP BED INVESTIGATION**

ITEM 175 of the Budget Bill

Budget page 691  
 Budget line No. 34

**FOR SUPPORT OF KELP BED INVESTIGATION FROM THE  
 FISH AND GAME PRESERVATION FUND**

Amount requested .....	\$50,000
Estimated to be expended in 1956-57 Fiscal Year .....	30,000
 Increase (66.7 percent) .....	 \$20,000

**RECOMMENDATIONS**

Amount budgeted .....	\$50,000
Legislative Auditor's recommendation .....	50,000
 Reduction .....	 None

The kelp bed investigation was initiated by specific authorization in the 1956 Budget Session to determine the cause and effect of various ocean phenomena on the kelp beds and the related effect on fisheries.

To initiate the study, the department contracted with the Regents of the University of California for assistance from Scripps Institution. Tentative contacts and certain commitments have been made, with field and laboratory equipment also being accumulated. A full report of activities of the project will cover the period of September through November, 1956. Initial investigation discloses that in one phase, it is planned to raise young stages of kelp under controlled laboratory conditions, which will then be transplanted into the field with their growth followed under a variety of natural conditions. Another phase involves various ecological studies on kelp to determine what happens to the nutritive elements under certain conditions and the effect on game fish. Information will also be sought on interrelations of animals and kelp.

As mentioned in our prior budget analysis on this item, the over-all expenditure will approach \$200,000, and the department has indicated that any investigation not correlated with the concurrent study of the State Water Pollution Control Board to determine the effect of sewage outfall on the kelp beds, cannot realize optimum success. The board advises that it has just recently contracted with the Allen Hancock Foundation for Marine Research at the University of Southern California to initiate a study of the effects of submarine sewage outfall. Since both the program of the department and that of the board are in the planning stage, no field correlation has as yet been effected. The department indicated that the programs will proceed independently but contact will be maintained to insure against duplication of effort and to benefit each agency with information compiled from the respective studies.

We feel that the department should provide a detailed list of proposed contractual and departmental expenditures to justify the \$50,000 proposed for the kelp study in the budget year, and further that a specific planned program relating to these expenditures be submitted to the Legislature for its perusal. Subject to the presentation of such a planned program, we recommend approval of this item as submitted.

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

ITEM 176 of the Budget Bill

Budget page 727  
 Budget line No. 7

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

Amount requested .....	\$125,000
Estimated to be expended in 1956-57 Fiscal Year .....	100,000
 Increase (25 percent) .....	 \$25,000

**RECOMMENDATIONS**

Amount budgeted .....	\$125,000
Legislative Auditor's recommendation .....	125,000
 Reduction .....	 None

**ANALYSIS**

The Marine Research Committee is an integral part of the department and is composed of nine members, five of whom are to represent the commercial industry, and in addition, by law, at least one is to represent the sporting interests and one to represent organized labor.

The committee was initiated in 1947 through legislation supported by the commercial fishing interests, primarily as a result of the serious decline of the sardine fisheries industry and the recognized need for research on this problem. To support the activities of the committee, a tax is levied on licensed fish packers and processors amounting to five cents for each hundred pounds or fraction thereof of sardines, Pacific mackerel, jack mackerel, squid, herring, and anchovies, whether purchased, received or taken. Chapter 808 of the Statutes of 1955 provides that this tax will continue in effect until December 31, 1957, at which time it will cease to exist unless legislation in the current session provides otherwise.

The committee is requesting \$125,000 for the budget year, representing a 25 percent increase over that budgeted for the current fiscal year. It is estimated that the accumulated surplus of revenues dedicated for marine research will be \$203,887 on June 30, 1957. Assuming that the privilege tax will not be continued beyond December 30, 1957, \$68,200 will still accrue to the fund during the first six months of the 1957-58 Fiscal Year, providing an ample surplus to operate the committee at the proposed level throughout Fiscal Year 1958-59.

Therefore, since funding is not critical and recognizing the importance of the committee's activities, it is recommended that the budget be approved as submitted.

**Department of Natural Resources  
DIVISION OF ADMINISTRATION**

ITEM 177 of the Budget Bill

Budget page 730

Budget line No. 7

**FOR SUPPORT OF DIVISION OF ADMINISTRATION FROM THE  
GENERAL FUND**

Amount requested -----	\$357,203
Estimated to be expended in 1956-57 Fiscal Year -----	291,063
 Increase (22.7 percent) -----	 \$66,140

**Summary of Increase**

		INCREASE DUE TO			
	Total increase	Work load or salary adjustments	New services	Budget page	Line No.
Salaries and wages -----	\$37,143	\$27,015	\$10,128	731	75
Operating expense -----	10,107	9,224	883	732	19
Equipment -----	38,664	15,810	22,854	732	28
Less increased reimbursements ---	-19,774	-19,774	---	732	40
 Total increase -----	 \$66,140	 \$32,275	 \$33,865	 732	 42

**RECOMMENDATIONS**

Amount budgeted -----	\$357,203
Legislative Auditor's recommendation -----	357,203
 Reduction -----	 None

The Division of Administration functions as a service agency to all divisions of the Department of Natural Resources and to the State Water Pollution Control Board. For accounting purposes, the office and related expenses of the director and deputy director are included in the Division of Administration's budget. The division is divided into three main sections; i.e., accounting, property and personnel and the conservation coordination activities of the department.

Changes during the current fiscal year which effected savings in this division or provided for more efficient control were:

1. Closing of branch pay roll offices in Los Angeles and San Francisco effecting an annual savings of approximately \$13,000.

2. Reorganization of the personnel office whereby personnel documents are processed by a single unit from their receipt to their disposal, rather than by several subfunctions as was done in the past. Not only is the efficiency increased thereby, but also this change allows the deletion of one clerical position.

3. Decentralization of the largest numerical proportion of the property accounting to the district level, which will relieve the departmental load of much of the detail now required to record, account and prepare inventory listings. This will afford the district administrators closer inventory control and will facilitate the ordering of replacement items. This system is on a pilot study basis in one district of the Division of Forestry. No definable saving has been isolated as yet, but the Division of Administration estimates that substantial amounts will materialize.

## Division of Administration—Continued

4. Mechanization of expenditure analyses to be able to provide information immediately for administrative purposes or for other requesting state entities, by installing a punch card system for cataloging all expenses relative to each installation within the Department of Natural Resources. This will provide the department with a self-appraisal tool with commensurate administrative benefits. Also it will reduce the time for assembling and increase the accuracy of information desired by committees and other agencies of the State Government.

Table of Increases 1947-48 to 1955-56

	1947-48	1955-56	Percent increase
Work index:			
Number of departmental employees-----	2,357	2,581.1	9.5
Number of bookkeeping machine postings-----	143,650	159,650	11.1
Number of claims-----	57,589	63,658	10.5
Number of divisional employees-----	70.4	74.6	6.0
Total expenditures-----	133,568	268,185	100.8

The work of the Division of Administration was materially altered in Fiscal Year 1952-53 after completing the transfer of the Division of Fish and Game out of the Department of Natural Resources. However, a steady numerical personnel increase in other departmental divisions requires the services of more Division of Administration personnel than when the Department of Fish and Game was a division in the department. The greatest increase from the 1947-48 Fiscal Year was in the level of salaries, involving almost 100 percent rise. Exclusive of the departmentalization of Fish and Game, there have been no other major program changes affecting the operation of the division.

The division, as a service unit to the various entities of the Department of Natural Resources and the State Water Pollution Control Board, is directly affected by any changes within those organizations. There is no administrative connection between the division and the State Water Pollution Control Board, the division merely providing housekeeping services to the board on a reimbursement basis.

## ANALYSIS

The division proposes a General Fund expenditure of \$357,203 in the budget year representing an increase of \$66,140 or 22.7 percent over the \$291,063 which it is estimated will be expended in the current fiscal year.

The bulk of the increase is attributable to the proposed addition of eight new positions, six of which can be justified on a work load basis and two which represent a new service. Also, the equipment item is to experience a 702 percent increase in the budget year due to the proposed installation of punched card tabulating equipment, which constitutes an expansion in service.

Of the six positions added to cope with work load demands, one is to be assigned to the claims section, four to the personnel section and one to the library section. Two new positions to constitute a new training service are to be assigned to the personnel section.

## Division of Administration—Continued

The new senior account clerk is justified on the basis of work load in the claims section of the accounts and disbursements function. The claims processing activity experiences changes in a direct ratio to the number of departmental employees. The work load factor used is one senior account clerk per 10,600 scheduled claims items which is considered desirable for maximum efficiency. To maintain this factor following the estimated increase in departmental personnel in the budget year would require the addition of the requested senior account clerk position. We therefore recommend approval.

As indicated, four new positions are being requested for the personnel section to absorb increased work load attributed to the increase of the number of personnel in the operating divisions of the department. These positions are one junior staff analyst, one supervising clerk and two intermediate typist clerks. Although the junior staff analyst is a new classification in the personnel section, it is intended to relieve the personnel officer of his routine technical work load and provide a means for more adequately performing these duties. This will provide for desk audits of positions requiring classification determination, assistance to divisions of the department with recruitment and examination scheduling, necessary changes in the personnel manual, and special studies of departmental problems relative to the use of sick leave, accident rates and compensation insurance claims, Reports of Performance effectiveness, disciplinary cases and turnover. Increases in the various divisions of the department have an immediate effect on the department's personnel section. To keep abreast of the work load and to realize optimum utilization of each employee in the personnel section, the division has determined that a ratio of one position of this section to each 200 departmental employees will be required. The requested employees for the personnel section will provide this ratio and we therefore recommend approval.

The operations of the respective libraries of the Departments of Fish and Game and Natural Resources have been combined for economy of operation and to make available like data in a central location. The Department of Fish and Game will supply the librarian position and the Department of Natural Resources will provide the clerical assistance and operating expenses. The operating expenses are budgeted by the Department of Fish and Game and charged pro rata to the Department of Natural Resources. To fulfill its responsibility the Division of Administration is requesting an intermediate typist-clerk. We recommend approval.

The tabulating equipment proposed for the 1957-58 Fiscal Year will cost approximately \$29,000 to install in the budget year. Subsequent charges for the equipment on a lease basis will be approximately \$3,137 annually. We feel that this is a wise investment to provide more adequate administrative control, and to eliminate excessive use of employee time heretofore needed to compile unit cost information on field installations so often requested by committees and other agencies of the State Government. We therefore recommend approval as budgeted.

**Department of Natural Resources  
EXHIBIT AT STATE FAIR AND EXPOSITION**

ITEM 178 of the Budget Bill

Budget page 730

Budget line No. 23

**FOR SUPPORT OF EXHIBIT AT STATE FAIR AND EXPOSITION  
FROM THE FAIR AND EXPOSITION FUND**

Amount requested .....	\$4,760
Estimated to be expended in 1956-57 Fiscal Year .....	4,760
Reduction .....	None

**RECOMMENDATIONS**

Amount budgeted .....	\$4,760
Legislative Auditor's recommendation .....	4,760
Reduction .....	None

**ANALYSIS**

The department has been requested by the board governing exhibits at the State Fair and Exposition to institute certain changes in the departmental displays. The average cost of these displays over the past few years has been \$5,000, but in the current fiscal year certain electrical code infractions in the displays were corrected for an additional outlay of \$2,000, bringing the total cost in Fiscal Year 1956-57 to \$7,000. It is proposed to continue this level of expenditure in the budget year to provide for the requested structural changes in the exhibits, and, as in the current fiscal year, the pro rata cost to the participating special fund agencies of the department will be \$2,240 in Fiscal Year 1957-58. The Fair and Exposition Fund will defray the balance of \$4,760. We recommend approval.

**Department of Natural Resources  
DIVISION OF BEACHES AND PARKS**

ITEMS 179, 180 and 182 of the Budget Bill

Budget pages 733 and 734

Budget line Nos. 58, 7 and 34

**FOR SUPPORT OF DIVISION OF BEACHES AND PARKS FROM THE  
STATE PARK MAINTENANCE, STATE PARK AND STATE BEACH  
FUNDS**

Amount requested .....	\$5,331,754
Estimated to be expended in 1956-57 Fiscal Year .....	4,412,411
Increase (20.8 percent) .....	\$919,343

**Summary of Increase**

	Total increase	INCREASE DUE TO		Budget Line page No.
		Work load or salary adjustments	New * services	
Salaries and wages .....	\$653,410	\$248,865	\$404,545	742 9
Operating expense .....	136,316	120,816	15,500†	742 10
Equipment .....	130,617	130,617	--	742 11
Less increased reimbursements .....	-1,000	--	-1,000	742 19
<b>Total increase .....</b>	<b>\$919,343</b>	<b>\$500,298</b>	<b>\$419,045</b>	

\* Included in "New Services" are salaries in the amount of \$392,377 attributable to the opening of new and the expansion in existing beaches and parks.

† Integration of all operating expenses negate an accurate separation of those attributable to work load and those resulting from expansion in facilities.

## Division of Beaches and Parks—Continued

## RECOMMENDATIONS

Amount budgeted .....	\$5,331,754
Legislative Auditor's recommendation .....	5,316,254
Reduction .....	\$15,500

## GENERAL SUMMARY

The Division of Beaches and Parks is the State's primary recreational agency. It administers, protects, develops and operates an extensive system of beaches, parks, historical monuments and riding and hiking trails in accordance with policies established by the State Park Commission.

The State is divided into six geographical units for field direction of the activities of parks within those units. Each park is administered through a park supervisor who is responsible to his district superintendent for the activities in his assigned park.

Table of Increases 1947-48 to 1956-57

<i>Work index (calendar year 1948 and 1956, respectively)</i>	<i>1947-48</i>	<i>1956-57 (est.)</i>	<i>Percentage increase</i>
Total parks .....	81	145	79.0
Number of state parks operated by:			
a. State .....	56	80	42.9
b. Local .....	12	37	208.3
c. Not operated .....	13	28	115.4
Attendance:			
a. State operated .....	4,441,066	12,265,695	176.2
b. Locally operated .....	19,543,774	25,500,000	30.5
Acreage .....	552,280	563,324	1.9
Population of State .....	9,708,000	13,800,000	42.1
Number of employees .....	244	533	118.4
Total state expenditures, exclusive of capital outlay .....	\$2,179,874	\$4,529,211	107.7

Even though the percentage of locally operated state parks increased considerably more than those which were operated by the State, the latter experienced a much greater percentage of increase in attendance than the locally operated parks. The attendance of the locally operated parks increased at approximately the same rate as the population of the State which would indicate that increased leisure and vacation time and increased tourist traffic affected attendance at parks of presumably state interest while the convenience of locally operated beaches and parks to the metropolitan area absorbed added attendance attributable to the population increase. This necessarily raises the question of the propriety of the State's maintaining financial interests in the majority of these locally operated parks. The State has already performed a valuable service in securing these locally operated areas for public use. However, because the value accrues primarily to adjacent populated areas we feel that all of the State's interests in these beaches and parks should be transferred to the local governments primarily benefited.

The primary problem affecting the continued expansion and development of the State Park System is the availability of funds. The Legis-

## Division of Beaches and Parks—Continued

lature in 1956 approved an acquisition program which will cost approximately \$31,000,000 to complete. The division advises that, with its presently augmented staff, appraisals and negotiations are proceeding at a rate which should insure completion of the currently authorized acquisition program by 1961. In addition to the acquisitions approved, the division estimates other desirable capital outlay expenditures for the five-year period ending in 1961 to exceed \$22,000,000. During the same five-year period, operation costs of the division could approximate \$34,600,000 for a total expenditure of almost \$88,000,000 by 1961, if income were available. With an estimated total income during the same period of \$37,500,000 plus the unappropriated balance on June 30, 1956, of \$35,500,000, the division could have amassed a potential net deficit of approximately \$15,000,000 at the end of the first five-year period under the existing income provisions. During the following five years from July 1, 1961, to June 30, 1967, the division estimates its average annual operational expenditure might reach \$9,700,000 for a five-year total of \$48,500,000 and capital outlay during the same period to approximate \$27,500,000, for a total expenditure of \$76,000,000.

Under the existing formula of distribution of the tidelands oil revenues the division will receive approximately \$30,000,000 in the second five-year period evolving a potential net deficit of \$46,000,000 for a total potential deficit in the 10-year period, July 1, 1956, to June 30, 1967, of \$61,000,000. At the end of this 10-year period, projects totaling over \$22,000,000 of the development program proposed in the division's five-year plan will still not have been completed.

Obviously, additional revenues must be provided if compliance is desired with apparent legislative intent exemplified when the Legislature endorsed and enlarged the five-year plan of the State Division of Beaches and Parks.

Although the ultimate cost of development will not be altered, perhaps the initial drain will be lessened to afford more time to establish adequate funding if the division would, during the next few years, concentrate its development efforts toward expanding existing facilities for maximum utilization. The greatest cost of providing a new area for public use is absorbed by roads, parking facilities, employee housing, rest rooms, and water development. Since these items are in existence in operating areas, only additional picnicking areas, camp sites and rest rooms need be provided. We do not endorse a program of continuing acquisition with no development of new areas, inasmuch as we feel that the legislative intent was to purchase and develop new areas on an orderly basis. However, we cannot endorse certain steps taken by the division to withdraw camping facilities as it has done in Doheny Beach State Park, or to build roads and employee housing in other areas which have not as yet been made available to the public or where camping is not proposed at all, such as at Tomales Bay State Park, when extensive field visitations during 1956 disclosed that the most pressing need was for more camping facilities, and that camping could logically be provided or expanded at many operating units.



## Division of Beaches and Parks—Continued

When California first started its development of a park system in 1928 as a result of the enabling \$6,000,000 bond issue, the availability of choice areas afforded a much greater ease of selectivity than exists today. The commission has attempted to apply its commendable set of state park standards or criteria for evaluating each proposed park; however, were those criteria applied today to areas which initially qualified for inclusion in the system, many would not measure up to the standards. The major factor effecting this change is the expanding urbanization. This population concentration has certain recreation needs which first must be answered on a local, county or regional level. Population pressures on several of the state beaches in particular indicate that these beaches are of more local than a state-wide value and, therefore, should logically be dropped from the state park system for complete local ownership, operation and maintenance. Of late, the reverse has been the case, since San Diego County has requested the State to take over the operation of beaches which, although owned by the State, are operated by the county. There is a critical need for objective evaluation of each existing park or proposed addition to the state park system to determine its proper relationship to the state-wide recreation picture.

In order to provide for adequate recreational facilities for the State as a whole, to a very large degree such provision must depend on joint agreements and cooperative action on the part of the various levels of government agencies. These political subdivisions must base their participation on the logical degree of responsibility each owes to a given situation of joint interest. A review of the entire system must be made to ascertain responsibilities for recreation to be used as a medium for assigning such responsibility.

This is not meant to preclude any state participation in local recreational development but rather to crystallize a system of state-owned and operated parks which are clearly of state-wide interest. All other parks should revert to ownership and operation by local, county or regional interests. Logically, the preponderance of state park units will be in the northern half of the State because of natural geographic qualities, while the most critical active recreational needs will be in the southern part because of the concentration of population. To compensate for the lack of state parks in the south, some thought could be given to a possible subvention of the total funds available for recreation to those areas to alleviate the inequities. We feel that a concise evaluation of the present and proposed park system will relieve the system of several areas, consequently relieving the budget of support expenditures which could be diverted for local use. As the state park system becomes saturated with all available areas of purely state-wide interest, funding needs of the division for acquisition will lessen, thus making available more of the annual allotment for recreation to be distributed locally on a per capita basis to help answer recreation needs in populous areas.

Another very critical problem and one which is becoming more acute as the division's operations increase is that of the administration of this

**Division of Beaches and Parks—Continued**

agency. Currently the division is administered by the State Park Commission, composed of five members appointed by the Governor and serving four-year staggered terms. At the inception of the state park system, problems of administration were not of such a magnitude that serious conflicts developed through administration of the division by the commission. Initially, the acquisition of land and the process of making such land available to the public could be and apparently was on an orderly basis. However, in the past 10 years, partially because of special appropriations giving impetus to the program, partially because of the growth of other state programs interrelated with the park system and requiring integrated planning, and especially due to the increasing complexity of the operation of a unit of the magnitude of this division's field responsibilities, the necessity for continuous administrative control is obvious.

The commission has served the State well in the organization and administration of the initial system, and it would be difficult to place a finger on the time the transition occurred when the division reached such proportions that the commission could not be expected to adequately cope with administrative problems on a month-to-month appraisal. It is apparent, however, that that situation does exist and must be met and resolved before the division can be objectively analyzed and steps taken to correct certain obvious deficiencies of that agency.

At present the commission is not responsible to the Director of Natural Resources for operation of the Division of Beaches and Parks, although by law the commission functions within the department. A previous determination of the Legislative Council (8-27-54) pointed out that the commission's jurisdiction over the State's beaches and parks can actually be conducted independently of the division, although the commission has chosen to operate the park system through the division. Therefore, it is apparent that the commission is empowered to exercise absolute control over the state park system, and that the Director of Natural Resources, for all practical purposes, can only make recommendations and oversee routine fiscal administration.

Since there is no constitutional provision which would prevent the Legislature from eliminating the State Park Commission or any of its powers, we would suggest therefore, that legislation be introduced to effect a transfer of all administrative authorities now vested in the commission to the Director of Natural Resources for any redelegation commensurate with sound management.

We feel that such action is necessary to insure the correlation of the various agencies concerned with natural resources in the State for a common integrated goal of conservation, preservation and public enjoyment.

If the Legislature takes such action, we would recommend further that a segment be created within the Division of Administration along the order of "Recreation Coordination" to provide for administration of the purely recreational services of the Department of Natural Resources and to serve as a liaison medium between the department and all other factions of public recreation to insure coordinated development of this public service.

**Division of Beaches and Parks—Continued**

Results of field surveys during 1956 indicated that a thorough analysis of the Division of Beaches and Parks is in order, to resolve problems of the lack of consistency between district operations, confusions in standards, records and line authorities, and in general, difficulties resulting from lack of sound administrative direction. We feel that vesting administrative control in the Department of Natural Resources will satisfy certain administrative problems, but it is apparent that many benefits of possible reorganization would result from a complete survey of the division.

**ANALYSIS**

The division is requesting \$5,331,754 in the proposed support budget for Fiscal Year 1957-58, which is \$919,343 or 20.8 percent more than the \$4,412,411 it expects to expend during the current fiscal year.

The increase is primarily attributable to the proposed addition of 94.4 employees, of which 37.4 are justified by work load and 57 are requested for expansion of existing facilities and the placing of eight additional areas into operation, including Benicia Monument, Colusa-Sacramento River, Caswell, Eureka Bowl, Grover Hot Springs, Lake Natoma (Folsom-Nimbus), Butano Forest and Torrey Pines. Benicia Monument and Torrey Pines have been previously operated by local agencies and are reverting to state operation.

No new programs are proposed; however, work load incurred from expansion of the park system pursuant to the action of the Legislature during the Budget Session 1956 accounts for \$798,454 of the proposed addition to the support budget of \$919,343. The following analysis will consider the functional subdivisions of the divisional operation separately.

**Administration**

Included in this function are the expenses of the State Park Commission which encompass not only the traveling and per diem expenses of the commission members, but also the salaries of the executive secretary and senior stenographer-clerk positions which devote full time to commission activities. Should action be effected by the Legislature to withdraw the administrative responsibilities of the commission, the duties of the executive secretary will be materially altered inasmuch as he has been assigned the responsibility by the commission as assistant to the Chief of the Division of Beaches and Parks in addition to his other duties.

In addition to the expenses of the commission, the administration function provides for the executive direction and general housekeeping activities of the division as well as the education and history sections.

The administration function proposes an increase of \$81,444, or 15.1 percent from the \$540,409 estimated to be expended in the current fiscal year to the \$621,853 requested for the budget year. New positions pro-

## Division of Beaches and Parks—Continued

posed, primarily based on work load are a "material and equipment specialist" to coordinate equipment requirements and develop reasonable standards, an "administrative assistant" to the administrative service officer, an "accounting technician" and two clerks which collectively account for \$25,020 of the \$25,726 increase in salaries for this function.

It is proposed to increase the operating expenses for the administration function by \$50,923, of which an increase in pro rata general administrative charges of almost \$14,000 for expanded departmental services to the division, rental increases of \$7,000, and two new services of \$15,500 account for the majority of the increase.

The two new services proposed are geological reports on state park areas for \$8,000 and investigation and interpretation of historical areas for \$7,500 (Budget page 736, lines 24 and 25). The geological survey is to be performed by the Division of Mines, which agency is to be reimbursed by the Division of Beaches and Parks. The investigation and interpretation of historical areas is to be contracted to various universities to accelerate the historical monument interpretive program.

It would be of interest to note the geology of a particular park on a state park folder, and it would serve certain value in considering the over-all geological picture of the State. The same "desirability" aspect also applies to the historical investigation. However, in considering the critical funding condition of the division, we feel it is necessary to delete from the budget any proposed service which does not serve an immediately vital purpose. *For this reason we recommend that both of these proposed new activities be denied, which would result in a savings of \$15,500.*

## Maintenance and Operation

This function proposes an increase of \$716,742 or 22.8 percent from the \$3,141,455 estimated to be expended in the current fiscal year to \$3,858,197 in the budget year.

Expansion in existing facilities and programs as well as the opening of the aforementioned new facilities to the public requires an increase of 78 employees to cope with the commensurate work load. Salaries and related operating expenses and equipment applicable to these new positions account for 90 percent of the proposed increase in this function. The other 10 percent is primarily attributable to normal merit salary adjustments.

As the function title denotes, the activities include the operation and maintenance of all of the State's beaches, parks, historical monuments and riding and hiking trails. Also included is the support of the activities of the six district offices which employ, in addition to the district superintendent and his assistant, small technical and clerical staffs. As we have previously stated, there is a divergence in operating procedure and variations of emphasis on park services among the districts. We feel that an intensive survey should be conducted as outlined in our

**Division of Beaches and Parks—Continued**

preface to this analysis to establish the most desirable and effective district operation which logically could be employed to insure a homogeneous operation throughout the State. Such a move would have immediate although perhaps not a readily measurable effect on morale, park condition and inter- and intra-district cooperation.

**Development**

This function surveys sites, prepares plans for construction projects not exceeding \$20,000 in cost for the development and maintenance of the beaches, parks, historical monuments and riding and hiking trails; inspects construction, surveys property boundaries, prepares landscaping studies, and provides engineering surveys for projects to be constructed by the Department of Public Works.

This section was augmented by 10 positions in 1956, five of which were for development planning and five for surveying, to accelerate the implementation of the five-year plan. The support of the positions was provided through special supplementation of the 1956-57 Budget.

This function proposes an increase in the budget year of \$75,322 or 19.5 percent from the \$385,624 estimated to be expended in the current fiscal year to the \$460,946 requested for Fiscal Year 1957-58.

Seven technical positions and one clerical position are requested which are justified on the basis of work load.

A great variety in the types and quality of facilities was noted during our field survey but it is understood that standards have now been established to which the division intends to adhere in all future developments.

**Lands Section**

This section is responsible for the negotiation for acquisition of areas for the park system and for rights of way and easements for riding and hiking trails.

It is proposed to increase the budget for this function by \$35,638 or 17.8 percent over the \$200,282 estimated to be expended in the current fiscal year.

Here again, three technical positions and two clerical positions are requested on the basis of work load and we recommend approval.

**Equipment**

Annually, our office meets with the Department of Finance and the Division of Beaches and Parks to survey the equipment items requested by the division. Critical examination is afforded each separate item to ascertain facts to determine if it is necessary and complies with an accepted standard of operation. In regard to this budget, the consensus of the group reduced the original division request of \$592,762 by \$164,317 or 28 percent, evolving the total equipment item as budgeted of \$428,445.

## Division of Beaches and Parks—Continued

## Reservoir Studies

This section was initiated during the 1956 Budget Session for the survey of the potential for state park purposes of sites in the immediate vicinity of existing or proposed large reservoirs. It was felt necessary to initiate this study both to insure availability of land around these reservoirs for public use and enjoyment, as well as to reduce the acquisition cost to the State by purchasing suitable sites contiguous to the reservoirs before their development so that the State would not have to pay the inflationary prices for land which invariably follows development.

It has come to our attention that the Department of Water Resources has contracted with an outside firm for an economic study of certain phases of the proposed State Water Plan included in which are to be recommendations relative to the recreational aspects of the plan. The contracting firm is expected to complete its study in the spring of 1957, and recently it presented a progress report at a public meeting showing detailed drawings of five Feather River reservoirs proposed in the Water Plan. Its recreational development plans indicated a heavy stress on private development around these reservoirs, while similar studies by the Reservoir Study section of beaches and parks approached the same reservoirs from a public use standpoint. The division is completing a report on the upper Feather River reservoirs which suggests possibilities for excellent public recreational use, which indicates that the two paralleling studies are actually proceeding at cross purposes to each other.

We feel there has been a waste of state funds in regard to the reservoir recreational studies since these studies were conducted both by the division and by the Department of Water Resources. Although the recreational aspect was but one element of the over-all study for which the Department of Water Resources contracted, nevertheless, the fact remains that two agencies have expended funds to accomplish the same thing, and from these studies diverse recommendations have evolved. Both policy and administrative elements of this problem should be clarified through development of a coordinated organization for long-range planning in recreation.

The division proposes to expend \$79,686 in the budget year, which is \$3,005 less than the \$82,691 estimated for expenditure during the current fiscal year. The enabling special appropriation for this section was \$100,000 with no provision for a reappropriation, however the specific functional assignment of reservoir studies inferred the continuing of this activity until the evaluation of the State's recreational potential relative to large existing and planned reservoirs had been completed.

We therefore recommend that the amount of the proposed budget for this section be approved conditionally on the basis that it will be related to proposed legislation to secure a complete program for reservoir usage.

**Department of Natural Resources**  
**DIVISION OF BEACHES AND PARKS**

ITEM 181 of the Budget Bill

Budget page 734  
 Budget line No. 18

**FOR SUPPORT OF ROADSIDE REST PROGRAM FROM THE  
 STATE PARK FUND**

Amount requested -----	\$113,724
Estimated to be expended in 1956-57 Fiscal Year -----	None
 Increase -----	 \$113,724

**RECOMMENDATIONS**

Amount budgeted -----	\$113,724
Legislative Auditor's recommendation -----	50,000
 Reduction -----	 \$63,724

**ANALYSIS**

The roadside rest program was officially initiated during the 1956 Budget Session, and a few such rests in both the northern and southern part of the State are planned for immediate development.

Our office, following extensive field surveys during 1956, determined that there were many suitable roadside rest locations contiguous to and within the boundaries of some existing fire suppression station sites of the Division of Forestry which were in the general location of rests proposed by the Division of Beaches and Parks. We requested that the Director of Natural Resources conduct a survey to determine the number of such acceptable locations so that the Legislature could be so apprised during the current session.

We feel that such an approach would secure many benefits to the State both in economy of operation and maintenance as well as other advantages resulting from such an integrated program.

Following the development of a roadside rest on or near a forestry site, Division of Forestry personnel could perform the minimal amount of maintenance and policing necessary to keep the site operative. Not only is land available on many fire suppression station sites for roadside rest development, but there is water also. At those sites contiguous to or on existing state forestry property where water is of ample supply, permanent type restroom facilities with septic tanks could be constructed and water could be piped to the picnic tables making a more complete and serviceable unit.

In our opinion, the maintenance and policing work load on these small areas would not be too time consuming to be included in the normal daily routines of the Division of Forestry's suppression station personnel. It has even been indicated that such activity could be a commendable part of the "in-camp" work of these men. Such work is planned to keep the men active but not exhausted between fires.

In addition to the benefits accruing to the individual agencies involved as well as the general economies to the State, a very important aspect is the integration of a service common to the activities of two separate divisions in the Department of Natural Resources. We feel that there are many other possibilities for such integration of functions and personnel within the department.

## Division of Beaches and Parks—Continued

The division has requested \$113,724 for the maintenance and operation of an estimated 70 roadside rests proposed for completion in the budget year. Since the number of rests to be completed is purely an estimate, and because of the economies which can be realized by pursuing our recommended approach, we recommend that of the roadside rests planned, as many as possible be built on or contiguous to Division of Forestry fire suppression stations, and that the budget for maintenance and operation of roadside rests be reduced to \$50,000 to provide only for anticipated necessary contracts for such services on roadside rests within the United States forests or in remote areas where county or Division of Highway contracts would be desirable. This reduction will result in a savings of \$63,724.

## Department of Natural Resources

## DIVISION OF FORESTRY

ITEM 183 of the Budget Bill

Budget page 743

Budget line No. 52

## FOR SUPPORT OF DIVISION OF FORESTRY FROM THE GENERAL FUND

Amount requested .....	\$13,742,006
Estimated to be expended in 1956-57 Fiscal Year .....	11,698,783
Increase (17.5 percent) .....	\$2,043,223

## Summary of Increase

	Total increase	INCREASE DUE TO		Budget Line page No.
		Work load or salary adjustments	New services	
Salaries and wages .....	\$1,097,856	\$175,709	\$922,147	757 61
Operating expense .....	411,831	70,331	341,500	757 64
Equipment .....	547,675	38,155	509,520	757 65
Less increased reimbursements .....	-14,139	--	-14,139	758 15
Total increase .....	\$2,043,223	\$284,195	\$1,759,028	758 17

## RECOMMENDATIONS

Amount budgeted .....	\$13,742,006
Legislative Auditor's recommendation .....	13,535,308
Reduction .....	\$206,698



## Division of Forestry—Continued

## Summary of Recommended Reductions

	<i>Salaries</i>	<i>Operating expense</i>	<i>Equipment</i>
Forest protection field services:			
1. Assistant ranger -----	\$5,027 (Budget page 751, line 24)	\$700	\$3,400
2. "Calaveras section transfer" -----	45,749	4,165	49,530
3. Drivers (195 seasonal man-months) -----	63,375 (Budget page 751, line 32)	--	--
4. Equipment operators (107 seasonal man-months) ---	34,752 (Budget page 751, line 33)	--	--
Totals -----	\$148,903	\$4,865	\$52,930

## GENERAL SUMMARY

The Division of Forestry is responsible for the prevention and suppression of fires in timber, watershed, and range areas in the State except on those lands under the jurisdiction of the Federal Government, and in those counties which provide their own fire protection under contract with the division. It cooperates closely with federal and local agencies to provide an effective system of fire control, and in addition it furnishes fire protection on a reimbursable basis to counties desiring this service in local rural areas. The division administers and enforces forest practice rules, manages state forest lands and provides forestry advisory services. It conducts a range improvement program, nursery stock for public plantings, windbreak, soil erosion control and reforestation purposes; controls white pine blister rust and forest insect infestations in cooperation with federal and private agencies, and cooperates with the Federal Government on forest surveys.

General policies directing the activities of the division are prescribed by the State Board of Forestry, a body of seven members representing the pine and redwood industries, forest land, livestock and agricultural operators, water users and the general public. The board defines lands eligible to receive forest fire protection at state expense, and approves the acquisition of state forests for management by the division.

The six district offices with headquarters in Santa Rosa, Redding, Sacramento, Fresno, Monterey, and Riverside respectively receive executive and functional supervision from the State Forester's office in Sacramento where also is located the business management activities of the division.

Table of Increases 1947-48 to 1956-57

	1947-48	1956-57	Percent increase
Work index:			
1. Fire occurrence in areas of state responsibility -----	2,614	2,676	2
2. Acreage burned -----	138,033	61,727	-123
3. Population -----	9,708,000	13,800,000	42
Employees:			
Permanent -----	378	515	36
Seasonal (Equivalent man years) -----	1,053	1,713	63
Total employees -----	1,431	2,228	56
Total expenditures -----	\$6,036,109	\$11,698,783	94

## Division of Forestry—Continued

As the above statistics indicate, the fire occurrence in areas of State responsibility has increased very little, but because of the variance from year to year we submit the following table to point out the lack of correlation between budget provisions for protection and suppression, population, fire occurrence and acreage burned.

<i>Fiscal</i>		<i>Calendar year</i>			
<i>Year</i>	<i>budget</i>	<i>Year</i>	<i>Occurrence</i>	<i>Acreage burned</i>	<i>Population</i>
1944-45 -----	\$2,590,320	1945	3,250	443,967	9,148,000
1945-46 -----	2,949,188	1946	3,322	238,398	9,548,000
1946-47 -----	4,114,449	1947	3,064	292,622	9,864,000
1947-48 -----	6,036,109	1948	2,614	138,033	10,165,000
1948-49 -----	7,150,379	1949	3,349	140,145	10,434,000
1949-50 -----	7,126,523	1950	3,071	302,858	10,609,223
1950-51 -----	8,104,188	1951	3,109	141,856	11,058,000
1951-52 -----	8,333,885	1952	3,129	119,475	11,743,000
1952-53 -----	9,185,921	1953	3,048	142,017	12,168,000
1953-54 -----	9,136,846	1954	2,987	139,791	12,595,000
1954-55 -----	9,188,444	1955	2,849	163,393	13,035,000
1955-56 -----	9,632,330	1956	2,676	61,727	13,800,000 (est.)

It will be noted that the first large budgetary increase in this series was in Fiscal Year 1946-47 which increase did not effect a corresponding decrease in acreage burned, the State actually experiencing an increase of 54,224 acres in that category. When the division's budget was held almost without change in the 1949-50 Fiscal Year from that in the 1948-49 Fiscal Year, the acreage burned more than doubled with basically the same personnel complement, and in the 1950-51 Fiscal Year with a \$1,000,000 increase in the budget, the acreage burned corresponded with that of the calendar year 1949. In 1955 with a support budget in excess of \$9,000,000, more acreage was burned than in 1948 with a budget of just over \$6,000,000. The acreage burned in 1956 was less than that experienced in many years on the heels of a large supplemental increase in the budget for 1956-57 not reflected in the table.

The only fairly stable figure is that of fire occurrence, which even with a steady increase in population, did not change appreciably. Obviously, many more factors contribute to the losses by fire other than the level of fire protection maintained, such as weather, winds, the location of the fire and the degree of cooperation received from other federal and local agencies. It would be impossible to predict what the acreage burned today would be if the division were still operating at the 1945-46 level of protection. In comparison with prior years, in all but Southern California the fire picture was very favorable in 1956 with the weather being a great contributing factor, and even in Southern California the major losses occurred on lands of federal and county fire protection responsibility.

This is not meant to detract from the importance of maintaining an adequate fire protection unit. However, we do want to make the point that "adequacy" is a very nebulous term.

## Division of Forestry—Continued

Any sound business concern will insure itself to a certain practical point, realizing that any expenditure over that point might be uneconomical. Insurance companies aid the businesses in setting that practical ceiling based on past experience. However, no complete data on the actual costs of fire suppression to the State have been kept by the division. Although such data would not be conclusive, nevertheless a more formalized approach could be made with such data to determine the level of insurance the State should maintain.

The State has primarily budgeted for increased field strength for active suppression in the past years, therefore apparently anticipating that little could be done toward lessening fire occurrence and acreage burned by other means, inasmuch as certain phases of fire prevention, research and employee training has not kept pace in budgetary allotments.

Conceivably, budgeting for active suppression could be materially affected if the existing complement of personnel could increase its effectiveness through intensive training and use of all field-proven methods and equipment developed through research, coupled with a highly developed fire prevention program of law enforcement and public education. We do not feel that the State should continue to pyramid one phase of fire insurance when it has not realized the full value of phases possibly just as important.

The division was instructed by the Board of Forestry to prepare a fire plan to reflect the present problems of the division and the requirements to provide adequate fire protection. This the division accomplished *according to standards established by the division* based on certain factors such as fire occurrence, types of terrain and cover, initial attack time and land values. The result was a very comprehensive report entitled "The 1956 Fire Plan," encompassing the proposed level of protection to be given lands of direct state responsibility, private lands within federal protection jurisdiction and private lands which ordinarily would be of state responsibility but which are, by choice, being protected locally. The fire plan presented the following as problems:

<i>Problem</i>	<i>To compensate</i>
Lack of trained leaders and operators.....	\$917,799
Shortage of firefighters and cooks.....	663,802
Need for seven new crews.....	162,355
Lack of initial attack bulldozer units.....	712,348
Lack of bulldozer pilot and service units.....	170,900
Lack of water supply trucks.....	207,147
Need for auxiliary equipment.....	173,977
Lack of adequate staff in Sacramento office.....	58,041
Lack of adequate staff in district headquarters.....	246,851
Lack of adequate staff in ranger unit headquarters.....	309,810
Need to augment fire prevention and law enforcement.....	379,785
Lack of proper training program.....	46,252
Need for personnel and equipment in forest management.....	48,934
Need for personnel in range improvement.....	24,604
Lack of personnel and equipment in existing honor camps.....	513,714

## Division of Forestry—Continued

Need for assuming protection in area in Calaveras County from U. S. Forest Service (present allotment \$33,034 for that area) increase needed	78,637
Need for Quartz Hill lookout in Siskiyou County	3,555
Need to increase funds to contract counties (increase of)	679,769
Need to increase funds to U. S. Forest Service (increase of)	570,685
Continue funds for emergency fire suppression (proposed \$270,000, a decrease of)	—50,000
Need for research in forest regeneration	10,000
Need for fire research	107,703
Total increase proposed	\$6,037,572

Approximately one-third of this schedule is reflected in the budget proposed for Fiscal Year 1957-58. Of the total fire plan increase, \$4,341,024 is earmarked for increases in active fire protection and suppression.

During the division's preplanning, some interesting statistics were compiled, revealing the 60 percent of all fire incidences on lands receiving state protection were caused by residents in the immediate area suffering the damage. It was indicated further that of the State's total population of some 13,800,000, approximately 500,000 live in the division's Zones I and II, which cover the critical watershed and forested areas. In other words, it appears that 60 percent of the fires are caused by persons in areas comprising 4 percent of the State's citizens. It appears that an excellent opportunity is afforded the division to reduce occurrences by accelerating a fire prevention program to personally reach every resident in the Zones I and II areas, inasmuch as the major portion of the division's field force is also located in those zones. The division has proposed a commendable plan to effect such indoctrination. Foremen of many fire suppression stations are to be provided vehicles so that, between fires, they can become completely familiar with the terrain in their zones of responsibility and can personally meet with and disseminate pertinent information to the local citizens. The benefits would be immeasurable and would ultimately affect the degree of protection needed in those areas.

A problem not mentioned in, or answered by, the fire plan is the increasing pressure to provide either the time for permanent employees to be with their families during the fire season or housing on or adjacent to station facilities to answer the same need. The division is one of the few major fire protection agencies where such provision is not made, which fact contributes to the constant turnover in trained personnel, especially in areas near large cities where employees are exposed to more favorable situations. To provide a minimum relief, the State would be compelled to increase the division's field staffing by 60 percent, or nearly 40 percent of the present total complement of personnel, which would add approximately \$4,100,000 to the present budget. Through experience, the division feels that housing of a minimum type of construction, or trailers at remote fire control stations would produce the desired results and the State would realize rentals which would eventually defray the costs of these facilities.

## Division of Forestry—Continued

We are not necessarily recommending either of these approaches. Nevertheless, we feel that the Legislature should be apprised of the potential "skyrocketing" expenditures involved with every increase in permanent field employees. Ninety-three of the new positions reflected in the budget proposal would have to be subsequently considered for relief or housing if the need for such consideration ever develops. The U. S. Forest Service, although not supplying personnel housing, provides a 25 percent of salary payment to its employees on the fire line and a percentage over that for on-call duty to attempt to compensate for this problem. However, the U. S. Forest Service employees work a straight 40-hour week, whereas the State's men are on duty 24 hours a day, five days a week, with a 10 percent straight bonus during the fire season, which season varies from the northern to the southern part of the State. We present the above as one of the major decisions which will undoubtedly face the Legislature in the near future and which is emphasized by this personnel increase.

Another problem which affects the efficiency of the field force is the age of line supervisory personnel. There is an age point at which the effectiveness of such an employee is materially reduced. Our field visits disclosed this to be one of the critical problems but not an economically insurmountable one. The division is participating in planning which is directed toward a substantially lower retirement age. However, we feel that the State should further avail itself of the valuable knowledge the forestry personnel have acquired during their tenure with the division, and recommend that consideration be given to legislation which would provide a basis for the orderly transfer of these men to the Division of Beaches and Parks where active physical requirements are considerably less, or to another division in the Department of Natural Resources where, until retirement age, these men could be gainfully employed.

We conducted a very thorough survey of the division's field units during 1956 and followed the development of the fire plan from its inception to its completion. We were very favorably impressed with the condition of the great majority of the facilities, the coverage and control of fire suppression units, the administrative coordination, the integration of all field activities into a progressive pattern of concise planning, and the precision of activity on the fire line proper. In no instance does there appear a concrete basis for assuming that the present organization is critically inadequate. We feel that certain expansions are desirable; however, we would caution against the endorsement of the entire 1956 Fire Plan until fair evaluation can be given to fire prevention (which embodies education and law enforcement), research and training, to determine the ultimate suppression needs of the division.

## Division of Forestry—Continued

## ANALYSIS

The Division of Forestry is requesting \$13,742,006 for Fiscal Year 1957-58, which is \$2,043,223 or 17.5 percent in excess of the \$11,698,783 estimated to be expended in the current fiscal year.

Of the total 71.7 additional permanent employees and the additional 162.5 equivalent man-years of seasonal employment requested, 44 permanent and 33 seasonal man-year equivalents are based on work load with 27.7 permanent employees and 129.5 equivalent man-years of seasonal employment attributable to new or expanded services. All of the additional allotments proposed to increase field suppression strength have been categorized as increased level of service and not work load, inasmuch as no concrete work load has been established to correlate with any known work factor such as number of fires, acreage burned, incidences, etc., nor can it logically be done. Any increase in suppression forces merely results in the setting of a new standard for a reference base in future proposals.

New programs planned by the division in which it is not at this time actively engaged are "forest regeneration research" and "forest fire research."

Expansions in existing programs which reflect a new approach are, (1) two training centers for employees; (2) coordination of forest fire research, and equipment development and maintenance programs; (3) increased stress on law enforcement by providing a coordinating position with district field complements; (4) provision of an assistant forest technician to disseminate forest management information to the small timber land owners in Butte and Plumas Counties; and (5) coordination of the division's activities in the watershed management, revegetation research and range improvement program.

## Administration

This section (Budget page 745) provides the executive direction and business management functions of the division, including the State Forester and supervision of the housekeeping, fire control, and engineering functions as well as direction of the operation of the Davis Warehouse and Equipment Repair Shop.

The administrative function proposes for the budget year to expend \$844,234, an increase of \$74,579 or 9.7 percent over the \$769,655 estimated for expenditure in the current fiscal year. The bulk of the increase is attributable to the proposed addition of seven new positions, all of which can be justified on the basis of work load. However, four of the positions represent improvement in the coordination activities, providing one assistant deputy state forester to coordinate agreements with other fire fighting agencies, fire dispatching, fire plans, facility evaluation, communications and fire statistics. This position will supervise the existing employee responsible for field inspection of contracts with the U. S. Forest Service to determine if full compliance is being afforded therewith by that agency. In addition, a proposed new position of state forest ranger I, to inspect for compliance with all such contracts other than with the U. S. Forest Service, will be supervised by

**Division of Forestry—Continued**

the proposed assistant deputy state forester. The budget includes a proposed contract with the U. S. Forest Service in the budget year involving \$953,677 as well as a distribution of this amount by a new formula which will require constant and close inspection by the State. It also includes proposed contracts with outside counties for the budget year of \$1,159,422; for schedule "A" agreements whereby the State provides fire protection on a reimbursement basis from counties of primary responsibility which in Fiscal Year 1955-56 amounted to \$1,626,046, and for schedule "C" agreements for state fire protection on a reimbursement basis from local fire districts with primary responsibility, which in Fiscal Year 1955-56 amounted to \$895,265. The total contract liability of the various agencies involved is approximately \$3,534,410 for the budget year. All of these contracts are to be provided continuing inspection through the proposed coordinating position.

The performance of these duties plus supervision of fire plans, communications, fire control, fire statistics and facility evaluation will relieve the deputy state forester in charge of fire control of this work load, affording that position more time for over-all fire control coordination as well as giving impetus and needed expanded service to those programs. We therefore feel the positions of assistant deputy state forester and ranger grade I requested for this sub-function are justified, and recommend approval.

A position of ranger grade II is also being requested to supervise and coordinate the applied fire research program of the division and will be responsible to the assistant deputy state forester in charge of the fire research and equipment development and maintenance programs. Since the division is becoming one of the chief tools of other research agencies for field evaluation of their findings, and since the division intends to initiate certain desirable projects of research through contract with other agencies, it is evident that the need for a coordinating position is assuming increased importance. The division cooperates with the Fire Research Division of the California Forest and Range Experiment Station, other agencies of the U. S. Forest Service, the University of California, the Research Council of California, and other public and private agencies to insure against duplication of efforts and for utilization of all favorable results of research. Since we agree that research can produce favorable economic results on future suppression needs, we recommend approval of this position.

Under the engineering and honor camp section of the administrative function, a position of assistant deputy state forester is being requested as a coordinating position over all engineering and Forestry Honor Camp activities.

A deputy state forester position was created in 1949 to initiate six new honor camps, and when those facilities were operative that position was dropped. The Legislature has authorized the expansion of the honor camp program to include two new such camps a year for the next several years. In the budget year, the division will operate 18 such camps and the need is apparent for the coordination of programming

## Division of Forestry—Continued

of projects and over-all planning in these camps. Since the honor camp program is expanding, and since the assistant deputy state forester who will be vested with the responsibility for the honor camp program can also perform a valuable service as executive officer of the engineering section in the absence of the deputy forester in charge, we recommend approval of this expansion of the engineering and honor camp section of the administrative function.

## Fire Prevention Education

This function (Budget page 748) is responsible for the preparation and dissemination to the public of fire prevention, informational and educational literature, slides and films through the various media of radio, television, press and personal appearances. It also constitutes the law enforcement tool of the division to insure compliance with regulations prescribed by the Legislature and the Board of Forestry, and to investigate, assign responsibility and follow through on litigation commensurate therewith. This is one function which we feel could produce considerable effect on the ultimate needs of the division's suppression machinery if sufficiently expanded and properly implemented.

The attempt will be made to reach every child and adult of the State with a type of material which will leave a lasting effect in reducing man-made fire occurrence. Fire prevention education is a tried and proven tool for producing favorable results and the experience in Orange County can be indicated as a specific example. There, in conjunction with division and district forestry personnel and interested local and educational factions, fire prevention has been brought to the fore as one of the major public education efforts. Courses have been devised and introduced into the schools at the fifth grade level and honorary groups have been formed for specific commendation for outstanding accomplishments in fire prevention. This program must of necessity have had some effect on the commendable low average of some 24 fire occurrences per year in the high hazard area of east Orange County.

However valuable fire prevention education can be, there are still some individuals who cannot be impressed with this approach, those being the grossly careless and the incendiaries. The State Forester has indicated that little is being accomplished which could and should be, to assign responsibility for carelessness and intentional setting of fires, and to insure prosecution. We feel that both phases of fire prevention should be exercised to the maximum, each being as important to gain its particular end as the other. We recommend that favorable action be tendered this function, for it is our contention that maximum exploitation of fire prevention coupled with maximum training of employees to use proven tactics and equipment, will not only reduce fire occurrences and acreage burned but also will afford an accurate evaluation of the division's suppression needs.



## Division of Forestry—Continued

The fire prevention function is proposing to expend \$125,253 in the budget year, which is \$40,441 or 48 percent more than the \$84,812 expected to be expended on that function in the current fiscal year. New positions proposed are: (1) a supervisor of law enforcement to coordinate the field activities to insure compliance with the provisions of the fire protection laws and forest practice rules to the fullest practicable extent, and to instigate and follow through on litigation resulting from civil or criminal violations relative thereto; (2) a state forest ranger grade I to formulate material for articles, pamphlets, posters, slides and television shorts, and to coordinate the distribution thereof.

It has been indicated that an average of 2,600 wild fires occur annually on the 22.8 million acres of forest, watershed and range lands of the State under direct state protection, and that 90 percent of these fires are man-caused. In cognizance of the potential values to be realized from the division's planned programming in fire prevention, we recommend approval of the budget for this function as submitted.

## Forest Protection—District Headquarters

This function (Budget page 748) provides administrative direction and coordination over activities of the field units.

The division proposes to expend \$1,125,343 for this category in the budget year, representing an increase of \$213,756 or 23 percent over the \$911,587 estimated to be expended in the current fiscal year. A proposed expansion in the personnel complement by 24.8 employees with applicable operating expenses and equipment account for the major portion of this increase. Of this increase, 11.8 positions are attributable to work load and the remaining 13 for new or expanded services.

Six of the work load positions will provide a fire control officer for each district, who will be responsible for automotive management, construction and maintenance of field service facilities, communications, and coordination of honor camp programs where no provisions are made for this activity, in addition to all fire control activities on the district level. These duties have been performed to a certain degree by the Deputy State Forester and his assistant in each district. Following our field visits, we recognized the need for such a position as is proposed for each district, and realizing that these positions as well as the 5.8 clerical positions are being requested on the basis of work load, we recommend approval.

Training is an activity of district operations which has been negligible to date. Although an in-service training program has been conducted on the district level to a certain degree, there has been no prescribed format for such training or any formalized training manual devised for this purpose. This situation has necessarily contributed to the fact that untrained personnel are often subjected to active fireline work without a sound basic background to prescribe the right move at the right time.

At the present time certain barriers to effective indoctrination of field men exists. These are:

1. Lack of time for division headquarters personnel to formulate a training program.

Division of Forestry—Continued

over its distribution and inventory control. We therefore recommend approval of the dispatcher and warehousemen-relief dispatcher positions.

The division is requesting an assistant ranger position (Budget page 751, line 24) to be domiciled at the new Sunol fire suppression station in Alameda County. His duties would be to coordinate the activities of the many fire districts throughout Alameda and Contra Costa Counties with the division's facility in that area. The improvement to be afforded the fire picture of those two counties by the addition of one man is questionable, especially in view of the rapid urbanization therein and the constantly changing fire picture. At the present time the counties are covered with fire districts which receive allotments from the general funds of the respective counties involved, and it is unlikely that county support will be withdrawn from areas needing fire protection. In our opinion, the State should not intercede to provide administrative control for these units, and we recognize the possibility of the duties of the proposed position expanding to a county fire marshal status, such as has inadvertently transpired in other counties of the State where the counties subsequently left responsibilities for administrative control over fire protection in outlying urban areas to positions similar to this one proposed position. We feel that this position is not critical to the protection of the state responsibility areas and therefore *recommend disapproval, for a savings of \$5,027 in salaries and \$4,100 in equipment and operating expenses, or a total savings of \$9,127.*

Again, the division has recommended transfer of the Calaveras section from United States fire protection to state protection. This is to constitute the first of several proposals with which the Legislature will undoubtedly be faced in subsequent budgets for the State to assume responsibility for the protection of large blocks of private lands presently within the United States forest protection boundaries. The key issues concerned are those of the degree of protection and past history of burns. The division allots \$33,034 to the U. S. Forest Service for federal protection in that area, with apparently favorable results.

The following is a tabulation of acreage burned in the Calaveras section involving either fires starting on state and private lands or fires spreading to these lands from federal lands in that section (total area involved, 153,712 acres, comprised of 110,149 acres state and privately owned, 42,551 acres U. S. Forest Service, and 1,012 acres Bureau of Land Management) :

Year	Acreage burned *	Calaveras section average burned to total (percent)	State average burned to total (percent)
1948-----	43	0.03	0.61
1949-----	0	0	.61
1950-----	338	.22	1.33
1951-----	409	.26	.62
1952-----	33	.02	.52
1953-----	47	.03	.62
1954-----	1	.0006	.61
1955-----	80	.05	.71
1956-----	5	.003	.27

\* Representing the bulk of all fires in the Calaveras area.

## Division of Forestry—Continued

Since the average acreage burned of the approximately 153,000 acres in the Calaveras section has been considerably less than the average acreage burned on the 22.8 million acres protected by the Division of Forestry, we cannot see any reason to effect a transfer of fire protection responsibility in this area inasmuch as the present protection is obviously adequate as well as more economical to the State.

In considering the location of the Beaver Creek inmate "spike" camp in the South Calaveras Grove for forestry cleanup and fire protection purposes, and the existing complement of personnel at the Murphy's fire suppression station, which station's zone of protection is contiguous to the Calaveras section, the division can supply aid conveniently to the U. S. Forest Service when such aid is needed in the Calaveras area.

The fire control function of the division has devised a plan which will apply to future contracts with the U. S. Forest Service and which the division wishes to put into effect in the budget year. By this plan the division will contract to pay the U. S. Forest Service a prescribed amount for the location of several of the federal protective agency's fire control stations in certain designated spots in or around private lands within the National Forests. The State will pay the salaries of line personnel and the Federal Government will defray the costs of equipment, facilities, and supervisory personnel.

If this plan were applied to the Calaveras area, the State would benefit from the same degree of protection at a lesser cost than if it assumed primary responsibility and constructed the planned two new fire suppression stations.

Because there has been no indication that the need for transfer of fire protection responsibility is critical, and because the State can conceivably secure approximately the same intensity of protection from the U. S. Forest Service for considerably less cost to the State, we feel that it is uneconomical as well as unnecessary to effect this transfer, *and therefore recommend the deletion of all outlays presented in the proposed budget commensurate therewith, resulting in a saving to the State relative to this subfunction of \$99,444 in salaries, operating expenses, and equipment.* Furthermore, it should be pointed out that after the first year there will be an estimated annual savings to the State of \$31,438 by *not* assuming protection of this area, inasmuch as the estimated annual charge would be \$64,650 if state operated, whereas the State contract to the U. S. Forest Service for this protection involves approximately \$33,000 annually.

The study which resulted in the fire plan indicated the existence of certain gaps in fire suppression station coverage based on travel time, land values, etc. To correct this situation the division is requesting a total of 137 man-months and necessary applicable equipment and operating expenses to make two proposed new stations operative. Since the proposed locations of these stations resulted from a thorough study indicating their need to provide adequate protection to their respective zone coverages, we recommend approval to insure a consistent pattern of fire protection throughout the State. In addition, the division is

## Division of Forestry—Continued

requesting 9 man-months to staff an existing lookout facility which to this date has been operated by the U. S. Forest Service. Our inspection of the area involved, disclosed that the lookout is of primary value to the State. We recommend approval of this proposal.

The division is also recommending an increase of 1,260 man-months to provide a sufficient number of trained year-round crew leaders, that is, foremen and drivers, and equipment operators for existing equipment and five proposed new medium bulldozer-transport units, in the budget year. Of the 202 man-months requested to provide a ratio of 1.5 foremen in all existing fire control stations, 144 man-months are to reimburse the foreman function for the loss of a like amount time directed toward an integrated training program. This program is designed to provide 12 men annually to fill expected vacancies in the assistant ranger classification. We believe this is a sound approach to the training problem involved.

The division is requesting necessary seasonal man-months of forest fire truck drivers to provide for one full-time driver for each of the 225 existing stations, plus the provision of year-round drivers for the second truck in certain stations. To provide for full year employment of one driver per station, an additional 680 seasonal man-months are required. The propriety of providing one year-round driver for each station can be justified on the basis of quality of personnel, benefits of past experience, knowledge of terrain and care of equipment; however, we cannot agree that the need is just as critical for year-round drivers on the second truck in fire stations, inasmuch as full winter duty is not a continuing thing and it is not economical to budget for the exception. *We therefore recommend the deletion of 195 seasonal man-months for drivers, (Budget page 751, line 32) for a savings of \$63,375.*

The division is also requesting sufficient seasonal man-months to provide two full-time equipment operators for each medium bulldozer transport unit including five new ones. We feel that forestry inmate personnel and other available personnel during the off fire-hazard seasons can be effectively utilized for relief on normal maintenance types of operations, since the same high degree of skill is not needed on these projects as is required on the fire line. However, in areas of continuing fire danger such as exists in the central coastal and southern California areas it is our opinion that such provision is justified. *We therefore recommend approval of 132 of the 239 seasonal man-months requested (Budget page 751, line 33 and line 40) to provide for two full-time personnel for the transport-bulldozer units in the two specified areas and to provide for the manning of the five new bulldozer-transport units, resulting in a savings to the State of \$34,752.*

We also recommend that the division prepare a comprehensive table of work units to indicate the gainful utilization of all existing heavy equipment year-round, and where equipment is not being put to full use because of lack of operating personnel, to so specify, in order that evaluations may be made for future needs and proposals.

## Division of Forestry—Continued

## Forest Protection—Forestry Honor Camps

One of the most beneficial innovations in the division's programming in recent years was the advent of the Forestry Honor Camp program (Budget page 752). Not only does this activity serve commendably as a rehabilitation medium for state prison inmates, but real impetus has been given to the development of fire trails, fire roads, fire hazard reduction, facility and equipment repair cost reduction, and many other beneficial programs. In recognizing the value of this program the Legislature has approved an expansion to include two new honor camps each year for the next several years. In the budget year the division anticipates an operation of 18 such camps and in addition, temporary assignments of four "spike" camps, which are merely components of the permanent camps and are placed in prescribed areas to perform a certain activity not economically serviceable on a daily basis from the parent camp.

Field surveys by our office disclosed the variance in values to the State between the camps established for Department of Corrections inmates and those for Department of Youth Authority inmates. It has been found difficult to utilize juvenile inmates on projects requiring personal responsibility or skill in arts and crafts, although the youths have served commendably as back-up suppression crews on going fires. However, in addition to the valuable back-up fire suppression service given by adult inmates, these men can and do perform almost any job of a technical skill required, and are by far more dependable than the youths under any given situation. The division has suffered continual criticism from local citizen groups in areas where juvenile inmates are quartered, and almost all difficulties arising from conduct violations of honor camp restrictions are attributable to the youths. We would recommend, therefore, that all honor camps both existing and planned be assigned adult authority inmates to the limit of their suitable availability before assigning Department of Youth Authority inmates. This would result in greater field productivity and project implementation by making these camps available to adult inmates of base institutions for those desirous of these activities, inasmuch as inmates of the Department of Corrections are chosen on a volunteer basis whereas inmates of the Department of Youth Authority are selected for the camps by departmental supervisory personnel.

The division proposes to expend \$2,322,774 for this function in the budget year, which is \$576,358 or 33 percent more than the \$1,746,416 which it is estimated will be expended in the current fiscal year. The bulk of the increase is attributable to the proposed operation of three new camps in the budget year at Crystal Creek in Shasta County, Puerta la Cruz in San Bernardino County and Pilot Rock in San Diego County. In addition, the division proposes to increase seasonal man-months available for supervision. The budget request provides foreman direction over each group of 15 inmates during normal work projects and over each group of 10 inmates on the fire line, as well as six equivalent man-years to operate heavy equipment at six specified locations. Heretofore, the camp bulldozer equipment has not often been

Division of Forestry—Continued

utilized on fires because of the lack of skilled operating personnel. There is also a recognized need for adequate supervision over the operation and maintenance of this equipment under normal conditions.

Because the productivity of these camps constitutes a measurable and beneficial service to the State, and in cognizance of the potential increase in service as well as of the division's liability for the safety of the inmates on going fires, we recommend approval of the budget for Forestry Honor Camps as submitted.

Forest Management

This function (Budget page 753) administers the Forest Practices Act, which is designated to insure the sustained yield of the State's forests. Forest management also provides consultation service on farm forestry to small timber land owners and is responsible for the management of the state forests.

In reference to the forest practice regulations, the division, during the current fiscal year, has devised forms, procedures and instructions for the registration of timber operators, and for owners' notices of proposed timber operations, to enable the State to compile more pertinent information for law enforcement purposes. Also, in connection with the annual reporting of accomplishments in forest practice inspection, steps have been taken to record improvements made by timber operators in correcting violations. This procedure not only has a desirable effect on developing the incentive for timber operators to make such corrections, but also provides the timber industry a medium for self-evaluation and intraindustry control.

A forest technician is being requested by the division for the budget year to provide coordination of the forest pest control programs, especially in white pine blister rust and forest insect controls. Heretofore, technical services to forest insect control projects on private lands under the primary responsibility of the Division of Forestry, have been given by the California Forest and Range Improvement Station, which will cease in the current fiscal year. The proposed position will attempt to collect information designed to provide for a more complete forest insect detection program. It has been estimated that 1.4 billion board feet of stumpage worth 21.4 million dollars was killed during 1955. Since this position in effect is based on work load for the continuation of this beneficial program and since it will relieve the man presently providing this service in conjunction with his administrative functions of service forestry, forest nurseries, and forest regeneration to more adequately perform these latter three activities, we recommend approval.

An assistant forest technician is requested to absorb the existing coverage in work load for the provision of technical forest management information to the small timber land owners of Butte and Plumas Counties under the service forestry program. On the basis of work load we recommend approval.

As mentioned, the Forest Management function is also responsible for the management of the state forests owned and operated by the division. The three existing forests represented an investment in 1955

**Division of Forestry—Continued**

of \$2,221,842.60. Revenue realized from timber sales, California Division of Forestry products and related miscellaneous income amounted to \$1,019,356.17 over the six-year period 1946-55. Operating expenses during the same time amounted to \$665,414.56 for a net operational revenue of \$353,941.61. However, to realize revenues from operations is not the primary purpose of these forests, such purpose being development, demonstration, and training to promote favorable forest management practices among timber operators. When inmates are available for work in the state forests, they conduct timber stand improvement work, road work, pruning, Christmas tree planting, trails and hazard reduction, spring and water development, fire prevention and experimental hand work.

One assistant forest technician is being requested to cope with the management problems involved with the enlargement of the Mountain Home State Forest in Tulare County, and an intermediate typist-clerk is being requested for Jackson State Forest, both positions based on work load. We recommend approval of the budget for this function as submitted.

**State Nursery**

This function (Budget page 755) provides administrative coordination and control of the division's primary nursery near Davis and the three smaller nursery operations located in Forestry Honor Camps.

This operation is a continuing program to develop stock for public planting, windbreaks, soil control and reforestation purposes.

The division proposes to expend \$67,878 for this activity in the budget year, which is \$4,092 or approximately 6 percent less than the \$71,970 it is estimated will be expended in the current fiscal year. We recommend approval.

**Range Improvement**

Constituting another minor program in the division's operations is this function (Budget page 756) which provides field advice and control over range reclamation activities of private landowners where burning is required.

Recent problems involving the extent of the State's liability as a participating party in the event unforeseen circumstances result in controlled burning projects getting beyond control has brought about a re-evaluation of this program by the division. Less stress has subsequently been placed on field administrative participation in controlled burns, with the State's primary contribution being "stand-by" fire fighting crews and equipment to bring such burns under control if necessary.

We feel there should be closer coordination with agricultural interests and other agencies using or recommending the use of fire for reclamation purposes so that all aspects can be weighed to determine the advisability of such activity. Apparently this coordination has not been developed to a maximum inasmuch as we noted in our field surveys that one agency had instigated burns which the division felt could contribute to serious erosion. There are many phases of the program which have not been adequately explored, and in recognizing the need

**Division of Forestry—Continued**

for such exploration as well as the need for coordination of the division's activities with those of many other agencies on areas needing mutual planning as in the case of small watershed management, the division plans to reclassify one position to an assistant deputy state forester grade. This man is to provide coordination of the division's activities in watershed management and revegetation activities, as well as to direct the range improvement program. In addition, a forest technician is requested on a work load basis to be directly responsible for division participation in watershed management activities.

We recommend approval.

**Equipment**

Annually, our office meets with the Department of Finance and the Division of Forestry to examine each equipment item requested. This examination resulted in the deletion of \$95,921 or 7 percent of the \$1,389,494 originally requested, evolving the net equipment item as shown of \$1,293,573. The participating group felt that the deletion of the items involved would in no way impair the functioning of the division.

**Department of Natural Resources**

**DIVISION OF FORESTRY**

ITEM 184 of the Budget Bill

Budget page 744  
Budget line No. 6

**FOR SUPPORT OF ALLOTMENTS TO COUNTIES FOR WATERSHED PROTECTION FROM THE GENERAL FUND**

Amount requested .....	\$1,159,422
Estimated to be expended in 1956-57 Fiscal Year .....	979,472
Increase (18.4 percent) .....	\$179,950

**RECOMMENDATIONS**

Amount budgeted .....	\$1,159,422
Legislative Auditor's recommendation .....	1,142,031
Reduction .....	\$17,391

**ANALYSIS**

Section 4006 of the Public Resources Code authorizes the State Forester to enter into contracts with those counties desirous of providing fire protection on state responsibility lands within their jurisdiction.

The division has prepared fire plans of the contract counties of Kern, Los Angeles, Marin, San Mateo, Santa Barbara, and Ventura in order to appraise the fire protection given state responsibility timber and watershed lands, so that the division could prescribe the protection to be given these lands by the counties for comparability with the protection given other areas directly by the division.

The fire plans of the counties include specifications for staffing, crew complements, equipment and numbers of crews and lookouts. Based on these fire plans, reimbursements are made by the State to the counties for all expenses relative to the prescribed protection to be given Zones I and II within the counties, except for salaries of administrative and service personnel, purchase of equipment and capital outlay.



## Division of Forestry—Continued

The division proposes to expend \$1,159,422 in the budget year, which is \$179,950 or 18.4 percent more than the \$979,472 estimated to be expended in the current fiscal year.

The proposed 1957-58 budget for the support of the Division of Forestry indicates an increase of 128 percent during a ten-year period while that of the contracts to counties has increased 176 percent. We have no basis for determining the adequacy of such contracts over this span of years, however, the division maintains that the proposed budget for this category will provide for protection comparable to that given areas directly by the division.

The following table indicates the trend of allotments:

County	Fiscal Year		
	1947-48	1956-57	1957-58
Contra Costa -----	-----	\$3,287	\$3,287
Kern -----	\$106,996	253,596	293,149
Los Angeles -----	114,683	324,767	395,700
Marin -----	26,577	80,792	92,125
San Mateo -----	35,947	84,328	91,879
Santa Barbara -----	39,716	115,206	138,597
Ventura -----	39,716	117,496	144,685
Totals -----	\$363,635	\$979,472	\$1,159,422

Since the proposed budget for contract counties is based on the level of protection given areas directly by the division, and in consideration of our recommendation for a total reduction in the division's budget of 1.5 percent, *we recommend that the proposed budget for contract counties be also reduced by that percentage, or \$17,391.*

**Department of Natural Resources**  
**DIVISION OF FORESTRY**

ITEM 185 of the Budget Bill

Budget page 744  
Budget line No. 10

**FOR SUPPORT OF PROTECTION OF PRIVATE LANDS WITHIN AND  
ADJACENT TO NATIONAL FORESTS FROM THE GENERAL FUND**

Amount requested -----	\$953,677
Estimated to be expended in 1956-57 Fiscal Year -----	813,677
Increase (17.2 percent) -----	\$140,000

**RECOMMENDATIONS**

Amount budgeted -----	\$953,677
Legislative Auditor's recommendation -----	971,877
Increase -----	\$18,200

**ANALYSIS**

The State Forester is authorized to contract with the U. S. Forest Service for the fire protection of private lands within and adjacent to the U. S. National Forests, for which the State would otherwise provide direct protection.

For many years the State has paid to the U. S. Forest Service a percentage of the over-all cost allotted the protection of these private lands

**Division of Forestry—Continued**

by the Federal Government. The percentage paid, which at the present time is 65 percent of the total operating cost of certain stations, was based on the degree of effort given or ratio of responsibility to be afforded private lands as compared with that to be given federal responsibility lands in specified areas. The State has consistently felt that 65 percent of the total costs applicable was equitable, but the U. S. Forest Service maintains that 80 percent is a more realistic figure. In any event there is no measure of actual effort expended by the crews concerned, and therefore any percentage of total cost assigned would be an arbitrary one.

To attempt to resolve this problem, the division has conducted a survey to evolve a fire plan for each U. S. forest using the same standards applied on direct state responsibility areas. Based on this plan, the division has established a detailed schedule of positions, number and sizes of crews, and locations of lookouts needed to provide the same degree of protection on private lands within the U. S. Forest Service's pay protection boundaries as is to be supplied on areas of direct state responsibility.

The division developed three basic objectives for the protection of these private lands:

1. That whenever existing state crews can expand their initial attack area to encompass blocks of private lands presently under federal protection, the pay protection boundaries be so revised.

The division has already launched into this program, having taken over the protection of some 28,000 acres of lands in this category without the need for additional outlay of men or equipment. Since the locations of the existing stations and desired travel time limits are comparatively static items, there is a logical limit to the acreage that can be transferred from federal to state control, but such transfer is desirable to the fullest extent possible and we urge that the division continue to follow this practice. There will be a definite savings to the State thereby, inasmuch as the acreage is applicable to the State's contract with the U. S. Forestry and the cost will be reduced accordingly.

2. The division plans to assume direct protection of the larger blocks of private lands within the U. S. Forestry pay protection boundaries in future years.

The proposed transfer of the Calaveras section from federal to state protection jurisdiction as presented in the support budget for the division for Fiscal Year 1957-58 represents the first in this category, covered under our discussion on page 610 of our Analysis of the Division of Forestry. At the present time we cannot recommend such an approach because of the many problems imposed with such action such as decreasing effective centralized control and overlapping jurisdictions and liabilities in those areas. Also, we feel that the third point outlined below will provide the same degree of protection in those areas for a lesser cost to the State.

3. For those areas under present and future U. S. Forest Service contract protection, the division intends to prescribe an organization comparable to the one for areas receiving direct state protection. In

**Division of Forestry—Continued**

recognizing the benefits such an organization will afford federal lands as well as state lands within the federal protection area, a cost breakdown has evolved a standard procedure whereby the State will pay the applicable federal salaries and costs assignable to the fire fighting personnel during the appropriate fire seasons and the Federal Government will pay the costs assignable to supervisory personnel and equipment.

The benefits of such a plan are obvious. The State can prescribe the location of the station, and the cursory inspections made by the support position assigned the responsibility of insuring federal conformance with the contract terms will be much more effective than under the present situation.

As mentioned above, we feel that by this method equal and more economical protection can be afforded all private areas within the existing federal pay protection boundaries, than by the method proposed by the division whereby the State would assume direct protection of blocks of private lands interspersed throughout the National Forests.

The method proposed under (3) above will cost the State slightly more than the "percentage of effort" approach. However, we feel it will have greater ultimate benefits.

If the Legislature agrees with our recommended deletion of state protection of the Calaveras area from the division's proposed program for the budget year, it will be necessary to allot an additional \$33,000 for state contract with the Federal Government to provide U. S. Forestry protection for that area.

Also, since the division has prepared its request for the U. S. Forestry Service contract figure of \$953,677 on a level of service to be afforded areas receiving direct state protection, and since our recommendations relative to that level of service reduced it by 1.5 percent, we recommend a reduction of \$14,800 in this proposed contract figure, which is 1.5 percent of the proposed \$953,677 plus the \$33,000 augmentation relative to the Calaveras section. This would evolve a net increase in the contract to the U. S. Government of \$18,200, and we therefore recommend that the support of this function be approved in the amount of \$971,877.

It should be pointed out that the proposed amount for contract service with the Federal Government is a net figure, the difference between the amount due the State for contract protection services for the Federal Government and the amount due the Federal Government by the State for protection of private lands by the U. S. Forest Service.

**Department of Natural Resources  
DIVISION OF FORESTRY**

ITEM 186 of the Budget Bill

Budget page 744  
Budget line No. 18

**FOR SUPPORT OF WATERSHED RESEARCH IN COOPERATION WITH  
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION OF THE  
U. S. DEPARTMENT OF AGRICULTURE FROM THE GENERAL FUND**

Amount requested .....	\$24,000
Estimated to be expended in 1956-57 Fiscal Year .....	24,000
Increase .....	None

## Division of Forestry—Continued

## RECOMMENDATIONS

Amount budgeted .....	\$24,000
Legislative Auditor's recommendation .....	24,000
Reduction .....	None

## ANALYSIS

This cooperative program was authorized by the Legislature with the enacting of Chapter 1415 of the Statutes of 1947, and consists of a contract with the California Forest and Range Experiment Station of the U. S. Department of Agriculture.

Prior to 1956, the state funds had been directed toward maintaining high priority hydrological records and analyses of rainfall, streamflow, surface run-off and soil moisture statistics. However, a recent evaluation of the program by the Division of Forestry has resulted in a reorientation of the objectives desired, and state funds are now directed toward four major research phases to provide information needed for practical field application. These phases cover:

1. Emergency treatment of burned watersheds.
2. Study of water use by riparian vegetation.
3. Manipulation of vegetation to increase water yield.
4. Analysis of hydrological studies.

The total support of the laboratory approximates \$82,750, of which amount the Federal Government defrays \$58,750 and the State \$24,000. We feel that the present and potential results of this activity directly benefit California and justify continuing the State's participation. We therefore recommend approval of the item as budgeted.

## Department of Natural Resources

## DIVISION OF FORESTRY

ITEM 187 of the Budget Bill

Budget page 744

Budget line No. 21

**FOR SUPPORT OF WHITE PINE BLISTER RUST CONTROL PROTECTION  
IN COOPERATION WITH THE U. S. DEPARTMENT OF AGRICULTURE  
FROM THE GENERAL FUND.**

Amount requested .....	\$115,000
Estimated to be expended in 1956-57 Fiscal Year .....	115,000
Increase .....	None

## RECOMMENDATIONS

Amount budgeted .....	\$115,000
Legislative Auditor's recommendation .....	115,000
Reduction .....	None

## ANALYSIS

The State has participated in blister rust control with the Department of Agriculture since 1936, and has expended \$1,495,877 in cash contributions and \$285,535 in labor on this program since 1941. In 1946 the State began the method of cooperation which is still in effect whereby California and the U. S. Department of Agriculture participate on a 50/50 basis.

## Division of Forestry—Continued

In 1953, the Legislature amended the Forest Pest Law to include disease control in order to give continuing statutory authority to the white pine blister rust control program.

Of the 2.2 million acres of commercial sugar pine in the State, only 468,748 acres qualify for inclusion in the rust control program. To determine what acreage should be included, a joint survey was made to select only those areas of better lands having adequate stocking and favorable control cost conditions, which resulted in approximately an even distribution of qualifying lands under state and federal jurisdiction.

The U. S. Forest Service administers most of the various phases of the program, including surveys, delineation of control areas, disease investigation, technical direction and eradication work. The State utilizes Forestry Honor Camp inmate labor for some of the control work, particularly on state lands. No control work is provided on private lands unless the respective owners sanction such activity and indicate a desire to control blister rust. The cooperating owners are invited to help defray the costs of the activity on their lands up to a maximum of 25 percent of the total outlay. However, of the 55 cooperators to date, representing ownership of a total of 135,034 acres of sugar pine under control zones, only eight have provided cash participation totaling \$4,700 in Fiscal Year 1955-56.

Since white pine blister rust control directly benefits the economy of the lumbering industry, we urge the division to exercise greater emphasis on attempting to secure the 25 percent financial participation from either the benefiting land owner, or, through some special measure, from the industry.

We recommend approval of the item as budgeted.

**Department of Natural Resources**  
**DIVISION OF FORESTRY**

ITEM 188 of the Budget Bill

Budget page 744  
Budget line No. 27

**FOR SUPPORT OF EMERGENCY FIRE SUPPRESSION AND DETECTION  
FROM THE GENERAL FUND**

Amount requested .....	\$320,000
Estimated to be expended in 1956-57 Fiscal Year .....	320,000
Increase .....	None

**RECOMMENDATIONS**

Amount budgeted .....	\$320,000
Legislative Auditor's recommendation .....	320,000
Reduction .....	None

**ANALYSIS**

It is uneconomical and impractical for the State to provide a support budget to the Division of Forestry designed to cope with any extraordinary demands on the suppression force.

Division of Forestry—Continued

Because there is considerable variance in fire occurrences and conditions, and because past experience has required the division to augment its fire suppression forces from outside sources in order to contain extensive or extremely dangerous fires for which it is not normally geared, the State has provided an emergency fund for such conditions.

The State Forester is authorized to draw on this fund only when he deems that a state of emergency exists. The provision for such a fund serves a two-fold purpose in that normal divisional programming is not curtailed by dipping into the support budget for extreme conditions and aid can be more expeditiously secured in this manner rather than through other available channels.

Although the support budget is to be considerably augmented for the budget year the increases requested do not provide adequate funds for emergency conditions. Therefore, we recommend approval of this item as submitted.

Department of Natural Resources

DIVISION OF FORESTRY

ITEM 189 of the Budget Bill

Budget page 744

Budget line No. 37

FOR SUPPORT OF FOREST INSECT CONTROL FROM THE GENERAL FUND

Amount requested .....	\$35,000
Estimated to be expended in 1956-57 Fiscal Year .....	35,000
Increase .....	None

RECOMMENDATIONS

Amount budgeted .....	\$35,000
Legislative Auditor's recommendation .....	35,000
Reduction .....	None

ANALYSIS

The Division of Forestry engages in a program for the control of forest insects, principally pine beetles.

Elements of insect control are exercised on both state and private lands. In the event that control efforts are expended on private lands, the landowner is required to match the state expenditure either by cash or labor under the rules established by the Board of Forestry.

Areas critically affected by forest insects are categorized as Zones of Infestation. Two zones for which allotments for control of the insects are specifically budgeted are the San Bernardino and San Jacinto Zones of Infestation in the amount of \$4,600 and \$4,000 respectively. In addition, one unallocated item of \$31,400 is recommended to provide available funds to be applied to any critically infested area which may appear during the budget year. The reimbursement from cooperating landowners in the budget year is estimated at \$5,000 producing a net budgetary proposal of \$35,000.

In recognition of the continuing critical need for this program, we recommend approval.

**Department of Natural Resources  
DIVISION OF FORESTRY**

ITEM 190 of the Budget Bill

Budget page 744  
Budget line No. 43

**FOR SUPPORT OF WILD LAND VEGETATION AND SOIL MAPPING  
FROM THE GENERAL FUND**

Amount requested -----	\$90,146
Estimated to be expended in 1956-57 Fiscal Year -----	92,741
Decrease (2.8 percent) -----	\$2,595

**RECOMMENDATIONS**

Amount budgeted -----	\$90,146
Legislative Auditor's recommendation -----	90,146
Reduction -----	None

**ANALYSIS**

This expenditure is for a continuing program designed to map the soil types and vegetation in the upland portions of the State where such mapping has not previously been done, in order to provide an inventory of the soils and natural vegetative cover of foothill and mountainous lands within the area of the State's fire protection responsibility, for forestry and range improvement programs.

The Legislature has authorized the present program through the provisions of Chapter 1875, Statutes of 1953. A previous soil mapping activity was initiated by Chapter 1538, Statutes of 1947. This earlier program was discontinued in 1952 and in the period of its effectiveness over 3,000,000 acres were surveyed by the California Forest and Range Experiment Station under contract to the State. This survey was primarily concerned with Mendocino County for which a generalized soil map was subsequently published.

Under the existing program, the survey work, as well as related grassland sampling and soil testing, is performed by the California Forest and Range Experiment Station, U. S. Department of Agriculture and the Agricultural Experiment Station of the University of California, under contract to the State.

Approximately 25 million acres are to be ultimately surveyed, of which 4,813,000 acres have been completed. In addition to the soil map for Mendocino County as noted, one has also been published for the upland areas of Lake County. Because no soil maps are to be published during Fiscal Year 1957-58 the budget as proposed reflects a decrease from the estimated expenditures for the current fiscal year inasmuch as the soil survey map for Lake County was printed in the current period.

We recommend approval of the item as submitted.

**Natural Resources****Items 191-192****Department of Natural Resources  
DIVISION OF FORESTRY**

ITEM 191 of the Budget Bill

Budget page 744  
Budget line No. 55**FOR SUPPORT OF FIRE WEATHER INDEX FROM THE GENERAL FUND**

Amount requested .....	\$10,000
Estimated to be expended in 1956-57 Fiscal Year .....	10,000
Increase .....	None

**RECOMMENDATIONS**

Amount budgeted .....	\$10,000
Legislative Auditor's recommendation .....	10,000
Reduction .....	None

**ANALYSIS**

The California Fire Danger Rating Project was established in 1955 as a cooperative effort by the California Division of Forestry, the U. S. Weather Bureau, and the California Forest and Range Experiment Station.

The request for appropriations to this project in the budget year is the third increment of a three-year program as envisioned by the Legislature when it authorized the State's participation. During this period a fire weather index has been compiled and tested in the Redding and Southern California areas producing favorable results affecting fire planning. During the budget year the index is to be applied to the entire State for subsequent evaluation.

Since results of this study can materially benefit all fire suppression forces by supplying data upon which constructive fire attack planning can be based, we recommend approval.

**Department of Natural Resources  
DIVISION OF FORESTRY**

ITEM 192 of the Budget Bill

Budget page 744  
Budget line No. 58**FOR SUPPORT OF FOREST REGENERATION RESEARCH FROM THE  
GENERAL FUND**

Amount requested .....	\$10,000
Estimated to be expended in 1956-57 Fiscal Year .....	None
Increase .....	\$10,000

**RECOMMENDATIONS**

Amount budgeted .....	\$10,000
Legislative Auditor's recommendation .....	10,000
Reduction .....	None



Division of Forestry—Continued  
ANALYSIS

The Division of Forestry is proposing this new research program to attempt to overcome a serious deficiency existing in the State today. The division has indicated that there are over 2.1 million acres of State and private lands which are either deforested or understocked. A major barrier to artificial regeneration is the lack of knowledge as to the effect of climate and soil conditions.

Many efforts at reforestation have been made but in several cases have met with disappointing results. It is apparent that more knowledge is required before effective plantings can be attained, and therefore we recommend approval of this item as submitted.

Department of Natural Resources

DIVISION OF FORESTRY

ITEM 193 of the Budget Bill

Budget page 744  
Budget line No. 61

FOR SUPPORT OF FOREST FIRE RESEARCH FROM THE GENERAL FUND

Amount requested .....	\$50,000
Estimated to be expended in 1956-57 Fiscal Year .....	None
Increase .....	\$50,000

RECOMMENDATIONS

Amount budgeted .....	\$50,000
Legislative Auditor's recommendation .....	50,000
Reduction .....	None

ANALYSIS

This proposal, in our estimation, represents a necessary and long overdue research approach toward making fire suppression units much more effective. This is by no means a new approach, inasmuch as many public and private agencies have been investigating various pertinent phases of forest fire research. Close contact is to be maintained by the State with other research agencies to insure against duplication of effort and to correlate activities.

The division recognizes three different phases of research, i.e., fire prevention, fire control, and fire use. Under the fire prevention phase, the objective will be to determine how all preventable man-caused and lightning-caused fires can be eliminated. Under the fire control phase, research will be directed toward determining the feasibility of using different types of detection systems such as television, infrared and ground-air combinations; to determine a fire behavior prediction system to indicate the rate and direction of fire spread, intensity of burning, and "blow-up" potential for various weather, topographic and fuel

Division of Forestry—Continued

conditions; to develop an efficient initial attack fire fighting organization so equipped and distributed that it will detect and put out fires when small, and to develop the most effective fire fighting techniques and equipment, such as helicopter and fixed-wing aerial tankers, chemicals as retardants, use of smoke or fog to shield fuels from ignition, and development of more appropriate equipment to answer modern day fire fighting needs.

Under fire use, the goal of research will be to determine if and how fire can be harnessed as an efficient and economical tool for use in appropriate wildland activities.

The division does not propose a long-range static type of research program, but will attempt to secure information immediately applicable to field operations for more effective fire management and control. It is the division's plan to perform some of its research and to let contracts for other phases. Specific programs proposed for the budget year are:

Cloud modification for lightning control.....	\$10,000
Fire behavior research.....	17,000
Fire protection economic study.....	2,000
Equipment development .....	18,000

Total requested for Fiscal Year 1957-58.....	\$50,000
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Throughout our Division of Forestry budget analysis we have indicated our appraisal of what ultimate effect an adequate exploitation of research, training, and fire prevention can have on the fire protection machinery which will be economically justifiable.

We do not feel that a huge force of men scattered throughout the State for fire suppression purposes will necessarily have the desired effect of lowering acreage burns. In our estimation the State should first support a fire prevention program designed to eliminate all preventable man-made fires, a training program to realize the maximum effectiveness of the division's personnel, and a research program to integrate into the training and fire prevention programs all currently proven techniques and equipment for optimum field success. We feel that a careful appraisal of the results of these three activities will indicate the actual size of the fire suppression force needed.

We therefore recommend approval of this item as budgeted.

Department of Natural Resources

DIVISION OF MINES

ITEM 194 of the Budget Bill

Budget page 761  
Budget line No. 8

FOR SUPPORT OF DIVISION OF MINES FROM THE GENERAL FUND

Amount requested .....	\$529,211
Estimated to be expended in 1956-57 Fiscal Year.....	501,820
Increase (5.5 percent) .....	\$27,391

## Division of Mines—Continued

## Summary of Increase

	Total increase	INCREASE DUE TO		Budget Line page No.
		Work load or salary adjustments	New services	
Salaries and wages-----	\$30,372	\$13,872	\$16,500	762 17
Operating expense-----	10,815	8,087	2,728	762 44
Equipment-----	—4,146	—5,031	885	762 58
Less increased reimbursements----	—9,650	—9,650	--	762 67
Total increase-----	\$27,391	\$7,278	\$20,113	762 69

## RECOMMENDATIONS

Amount budgeted-----	\$529,211
Legislative Auditor's recommendation-----	517,098
Reduction-----	\$12,113

## Summary of Recommended Reductions

Position	Salary	Operating expense	Equipment
1 Assistant mining geologist-----	\$5,772	\$2,228	--
2 Junior mining geologists-----	10,728	500	\$885
Totals-----	\$16,500	\$2,728	\$885
Total recommended reductions-----	\$20,113		
Less: Reduction in reimbursement from Division of Beaches and Parks-----	—8,000		
Total net reduction-----	\$12,113		

The Division of Mines provides technical information on the geology, mining, mineral resources, and mineral industries of California. It employs a technical field force to effect special studies for securing information and compiling it for publication. The division attempts to keep current a detailed and comprehensive geological map on the counties in the State and to publish and make available to the public all relevant data on the mineral resources of California.

Administrative policies directing the administration of the division are established by the State Mining Board, which consists of five members representing the mining industry, who are appointed by the Governor. The headquarters office of the division is located in San Francisco, with branch offices at Los Angeles, Sacramento, and Redding. The division is administered by the chief, also known as the State Mineralogist, assisted by a supervising mining geologist acting as deputy chief who supervises division activities and personnel, and by a senior mining geologist who is responsible for mining engineering, mineral inventory reports, and for further supervision of division housekeeping or business management. The editorial and drafting sections for processing of technical reports for publication are directly responsible to the chief.

Formerly, the technical work of the division was divided between a geological branch and a mining engineering branch, but it now is divided into four areas of activity; i.e., mining engineering, technical information services, mineralogy and petrology, and geologic and commodity surveys. Included under the mining engineering phase are the responsibilities for the operation of the smaller branches at Redding

## Division of Mines—Continued

and Sacramento, the preparation of county reports on geology, mines and mineral resources, and mineral utilization surveys. The technical informational services encompass mining activities, mineral economics, library, and written and oral information for the public. Mineralogy and petrology include the laboratory rock, mineral and ore identification program for the public, petrographic research and mineral exhibits. The geologic and commodity survey phase includes basic geologic mapping and state-wide surveys by mineral commodities.

Two continuing periodicals in addition to occasional bulletins and special reports are published by the division. The two periodicals are "Mineral Information Service" published monthly and sold to those interested on a \$1 per year subscription basis, and *California Journal of Mines and Geology* published quarterly. The latter is available by direct purchase or on a subscription basis. The technical reports and bulletins are also made available to the public for a price designed to cover the cost of publication. Free distribution of all division reports are made to libraries, and, on an exchange basis, to other geological surveys.

Table of Increases 1947-48 to 1955-56

Work index:	1947-48	1955-56	Percent increase
Reports published and reports processed for publication .....	41	65	58.5
Number of specimen analyses .....	1,926	5,935	208.2
Information supplied by personal service—correspondence, telephone, and visitors....(est.)	34,000	81,433	139.5
Number of employees .....	33.8	52.2	54.4
Total expenditure .....	\$214,566	\$453,761	111.5

The comparison of reports by number processed and published is not necessarily a valid one inasmuch as reports vary in length and complexity, therefore not indicating the comparable time spent in their preparation.

## ANALYSIS

The Division of Mines proposes to expend \$529,211 in the budget year, which is an increase of \$27,391 or 5.5 percent over the estimated expenditure for the current fiscal year of \$501,820. The major portion of the proposed increase is attributable to the request for five additional positions of which two can be attributed to work load and three to an increase in the level of service.

An associate mining geologist is being requested for aid in the Redding area which encompasses nine northern counties. At the present time the division has but one man assigned to cover these counties, which has proven insufficient. Because of the correlation between raw materials and water for potential industrial exploitation, it is believed necessary to expedite the geological surveys in the northern area of the State in anticipation of such informational demands which undoubtedly will develop as the state water plan materializes.

The following table will illustrate the area work load problem facing the geologist in the Redding area.

## Division of Mines—Continued

Office	Number of technical staff	Number of counties served	Area Covered square miles	Area per man square miles
Redding -----	1	9	32,865	32,865
Sacramento -----	2	14	16,699	8,350
Los Angeles -----	6	12	66,420	11,070

An additional technical position in the Redding office will reduce the area per man from 32,865 square miles to 16,433 square miles, still well above the area assignments of the other two offices. We feel that it is in the interest of the State to expedite the surveys and to provide the relief, apparently needed in the Redding office, and therefore recommend approval of this position.

An assistant mining geologist is requested to provide for the preparation of geological reports on state park areas. The expenditures relative to this study, estimated at \$8,000 in the budget year, are to be defrayed by the Division of Beaches and Parks as a reimbursement to the Division of Mines. In effect, this proposed special study is a new service to the Division of Beaches and Parks and is an expansion in service in the Division of Mines. The Division of Beaches and Parks is to receive special consideration by this utilization of a geologist on state park lands only. Also, the Division of Mines is to be reimbursed thereby for work which it is specifically directed to do from funds budgeted for the support of the division pursuant to Section 2205(a) of the Public Resources Code. We feel that surveys of the State should proceed in an orderly and planned fashion and that any particular emphases compatible with such planning can be effected through administrative intra-agency direction. Since the proposed position merely gives impetus to a program which by its nature is not critical as to the date of completion, thereof, and also since the funding situation for the support of the Division of Beaches and Parks is critical, *we recommend deletion of this position, Budget page 762, line 12 of the budget, and operating expenses applicable thereto for a savings to the State of \$8,000. In eliminating this program, the proposed reimbursement of \$8,000 to the Division of Mines from the Division of Beaches and Parks will also be deleted, which results in no change in the Division of Mines' budget relative to these items.*

Two junior mining geologists are being requested to give impetus to the geological surveys in the twelve southern counties of the State. As a major justification of the need for these positions, the division states that the quantity of time absorbed by providing personal information service in the Los Angeles office to the interested public is so excessive that field work suffers. In examining the Public Resources Code relative to the objectives and intended services of the division, we do not find any section where, by direction or by intimation, the division is to provide technical "counter" service for information purposes. The specific reference made to "Information" appears under Section 2205, paragraph (g) of the Public Resources Code as follows:

*"Establishment of bureau of information. Maintain, in effect, a bureau of information concerning the mineral industries of this State, to consist of such collections and library (as provided by paragraphs*

Division of Mines—Continued

(d), (e), and (f) of this section), and arrange, classify, catalogue, and index data therein contained in a manner to make the information available to those desiring it.”

Apparently the decision to provide personal office interview service was an administrative one and has been so practiced for many years. We recognize that such service has value, but are of the opinion that this method of providing information retards the performance of the division’s primary objectives of geological surveys. We feel that the technical employees should be relieved of “counter information” services and assigned more gainful duties in the field.

We do not think that the public would be discriminated against by such a move, inasmuch as the office could still serve as a reception point and the clerks could refer any requests of a technical nature to one of the geologists for comment at his convenience. Undoubtedly there are many similar requests which absorb much of the time of the office personnel. The division should categorize the more popular questions and publish a brief pamphlet which the clerk could make available to the individuals concerned with its contents. All requested information requiring official or technical reports or letters could be recorded on a dictaphone for transcription by the stenographer-clerks during normal work hours. We feel that such an approach is necessary to gain the maximum benefits of the specialties of the available personnel. Until a more satisfactory evaluation can be made of the potential of the existing technical force in the Los Angeles office as a result of the discontinuing of all “counter information” duties of the geologists, *we recommend that the proposed two junior mining geologist positions be denied, for a saving to the State of \$10,728 in wages, \$500 in operating expenses, and \$885 in equipment for a total savings of \$12,113.*

The division is also requesting an intermediate stenographer-clerk position on the basis of work load. Because of the location of the office in metropolitan Los Angeles and the number of technical reports which originate in that office we recommend approval of the stenographer-clerk position.

Department of Natural Resources

DIVISION OF MINES

ITEM 195 of the Budget Bill

Budget page 761

Budget line No. 23

FOR SUPPORT OF GEOLOGICAL EXPLORATION IN COOPERATION WITH  
U. S. GEOLOGICAL SURVEY FROM THE GENERAL FUND

Amount requested .....	\$35,000
Estimated to be expended in 1956-57 Fiscal Year .....	35,000
Increase .....	None

RECOMMENDATIONS

Amount budgeted .....	\$35,000
Legislative Auditor's recommendation .....	35,000
Reduction .....	None

**Division of Mines—Continued**  
**ANALYSIS**

A continuous survey of the geological features of the State of California is carried on by the United States Geological Survey. The current fiscal year marks the twelfth year that the State has provided financial participation in the survey, having defrayed 50 percent of the cost thereof during this period of time. The actual survey work is performed by the Federal Government, and the data, maps, and reports which the State receives as a result of these surveys would cost the State considerably more to assemble through its own available services than the \$35,000 expended by the State as its share of the program.

Because of the vital need for these materials as primary reference data for the Division of Mines in its day-to-day operation, we feel that the State's participation in the program should be continued.

The division anticipates no change in the level of survey operations in the budget year, therefore proposing to expend \$35,000, the same amount provided in the current fiscal year, and we therefore recommend approval of this item as submitted.

**Department of Natural Resources**  
**DIVISION OF MINES**

ITEM 196 of the Budget Bill

Budget page 761  
 Budget line No. 25

**FOR SUPPORT OF STATE GEOLOGIC MAP FROM THE GENERAL FUND**

Amount requested .....	\$25,000
Estimated to be expended in 1956-57 Fiscal Year .....	None
Increase .....	\$25,000

**RECOMMENDATIONS**

Amount budgeted .....	\$25,000
Legislative Auditor's recommendation .....	25,000
Reduction .....	None

**ANALYSIS**

This item is to provide for the first of four stages to prepare a colored edition of the State Geologic Map. The last edition was completed in 1938 and has been out of print for five years.

The planned edition is to consist of 30 sheets covering the entire State and will be printed on a regional base revised by the Army Map Service in 1957 as part of a program to provide complete coverage of the United States. The Army coordinate system is to be deleted and a land survey net added by the U. S. Geological Survey, as in other states, so that eventually there will be a geological coverage of the United States on the same scale. The same base will also be used for preparing commodity maps showing the distribution of mineral deposits.

In addition to providing for an understanding of the distribution and occurrence of mineral deposits, the geologic maps will serve for:

Division of Mines—Continued

- (1) Basic geological data for selection of sites for public works projects—dams, highways, aqueducts, etc.
- (2) Basic data on soils studies for agricultural purposes.
- (3) Data of interest to the building industries—location of faults, etc.
- (4) Basic data for ground water supplies.

It is anticipated that there will be a preliminary printing of 6,000 copies of each of the 30 sheets. Allowing for a reasonably assured sale of 4,000 copies at a suggested price of \$1.50 per sheet, the division should realize an estimated return of \$180,000. The entire cost of printing should approach \$100,000 in which case the State should receive an amount which will exceed the cost of printing.

In considering the values of such a map to a variety of economic interests and the potential defraying of all state costs relative thereto, we recommend approval of this item as submitted.

**Department of Natural Resources**  
**DIVISION OF OIL AND GAS**

ITEM 197 of the Budget Bill

Budget page 764  
Budget line No. 7

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

Amount requested .....	\$655,429
Estimated to be expended in 1956-57 Fiscal Year .....	619,359
Increase (5.8 percent) .....	\$36,070

**Summary of Increase**

	Total Increase	INCREASE DUE TO		Budget Line page No.
		Work load or salary adjustments	New services	
Salaries and wages .....	\$18,011	\$18,011	--	--
Operating expense .....	10,673	10,673	--	--
Equipment .....	7,386	7,386	--	--
Total increase .....	\$36,070	\$36,070	--	--

**RECOMMENDATIONS**

Amount budgeted .....	\$655,429
Legislative Auditor's recommendation .....	655,429
Reduction .....	None

**GENERAL SUMMARY**

The Division of Oil and Gas, supported by an annual assessment levied against oil and gas producers based on barrels of oil produced and gas produced and sold, is responsible for the supervision of drilling, operating, maintenance and abandonment of oil wells throughout California to prevent waste and damage to the State's oil and gas deposits as well as to protect fresh water resources from pollution.



## Division of Oil and Gas—Continued

The rate of fees supporting the division are adjusted to the volume of oil and gas production to insure support of the entire divisional operations plus the maintaining of a \$50,000 surplus in the Petroleum and Gas Fund. Other revenues such as sale of publications are included.

Table of Increases 1947-48 to 1956-57

<i>Work index</i>	<i>1947-48</i>	<i>1956-57</i>	<i>Percent increase</i>
New producing wells-----	1,899	1,800	—5.2
Producing and potential wells-----	52,863	42,600	—19.4
Oil well inspections-----	3,759	4,300	14.4
Well reports written-----	4,886	9,300	90.3
Employees-----	55.2	78.5	42.8
Total expenditures-----	331,566	619,359	86.8

## ANALYSIS

The Division of Oil and Gas proposes to expend \$655,429 in the budget year representing an increase of \$36,070 or 5.8 percent over the \$619,359 estimated to be expended during the current fiscal year. As the above table illustrates, certain work load criteria have decreased while others have increased. The most consistent item correlated with the total expenditure increase appears to be the volume of written reports. Information supplied indicates that the present complement of personnel are gainfully employed and with the one program change detailed below it is our feeling that the division will be adequately staffed to meet the demands of industry work load.

For administrative and inspection purposes, the State has been divided into six districts, designated Los Angeles, Santa Paula, Santa Maria, Taft-Bakersfield, Coalinga and Yolo County, respectively. To date the Yolo County district (District 6) has been serviced out of the Coalinga district (District 5). However, increased activity especially in the Sacramento Valley area of District 6 has created a problem of work load which the personnel in District 5 have not been able to service. Based on an estimated 83 work units per technical employee in District 6, somewhat less than the average of the other districts of 102 units per technical employee but nevertheless of such proportion as to demand separate attention, the division proposes to activate an office in the vicinity of Sacramento to service this district. District 6 comprises roughly all of the State north of the San Francisco Bay region plus the counties of San Joaquin, Calaveras and Alpine and all counties north thereof, although as mentioned the preponderance of activity is in the Sacramento Valley.

To activate the new office will require a senior and an assistant oil and gas engineer and an intermediate stenographer clerk. The assistant oil and gas engineer previously responsible for inspections in District 6 but operating out of District 5 will be transferred to the new office, thus necessitating the addition of only the senior oil and gas engineer and intermediate stenographer clerk. The \$11,976 involved in these new positions represents that portion of the total salary increase of \$18,011 which can be attributed to work load, the remainder ascribed to normal salary adjustments.

Division of Oil and Gas—Continued

Recent rental adjustment from changes in office facilities in San Francisco and Los Angeles, as well as that anticipated for the District 6 office, account for the bulk of the \$10,673 increase in operating expenses. The equipment necessary in conjunction with the proposed new office absorbs the majority of the increase of \$7,836 in that category for the budget year.

Exclusive of this one program change the division proposes the same level of service provided in the current fiscal year. We recommend approval of this agency's budget as submitted.

Department of Natural Resources  
DIVISION OF SOIL CONSERVATION

ITEM 198 of the Budget Bill

Budget page 766  
Budget line No. 7

FOR SUPPORT OF DIVISION OF SOIL CONSERVATION FROM THE  
GENERAL FUND

Amount requested .....	\$165,534
Estimated to be expended in 1956-57 Fiscal Year .....	78,350
Increase (111.3 percent) .....	\$87,184

Summary of Increase

	Total increase	INCREASE DUE TO		Budget Line page No.	
		Work load or salary adjustments	New services		
Salaries and wages .....	\$58,010	---	\$58,010	766	72
Operating expense .....	19,495	---	19,495	767	17
Equipment .....	9,769	---	9,769	767	24
Less increased reimbursements .....	—90	---	—90	767	29
Total increase .....	\$87,184	---	\$87,184	767	31

RECOMMENDATIONS

Amount budgeted .....	\$165,534
Legislative Auditor's recommendation .....	161,172
Reduction .....	\$4,362

Summary of Recommended Reductions

		Budget page	Budget line
1 Senior stenographer-clerk:			
Salaries .....	\$3,900	766	69
Equipment .....	462	767	24

GENERAL SUMMARY

The Division of Soil Conservation was created by the Legislature in the 1955 General Session through the provisions of Chapter 1680 of the statutes of that year. The division was assigned all administrative responsibilities previously exercised by the State Soil Conservation Commission, with the commission specifically charged by the statute to implement a study of and consider the entire problem of soil conservation within the State, and also to determine and advise policies for the guidance of the chief of the division in the exercise of his duties and powers.

## Division of Soil Conservation—Continued

The primary responsibilities of this agency are to aid in the formation and operation of soil conservation districts; investigate and report on recommended boundaries for new district proposals; advise district directors on soil conservation activities, and also to cooperate with federal, state and local organizations in the common goal of soil conservation and water runoff retardation.

The field activities for actual implementation of soil conservation throughout the state are concentrated in the soil conservation districts. After a district has become legally recognized through state processing, it receives technical help from the Soil Conservation Service of the U. S. Department of Agriculture. Such aid includes engineering, surveying and professional advice relative to erosion control and conservation practices which provide for improved irrigation, land drainage, flood control, development and protection of water supplies, soil and crop improvements, range and pasture improvement, weed and rodent control and the proper use of wastelands. Also, consideration is given to sound wildlife management.

Table of Increases 1947-48 to 1956-57

Work index:	1947-48	1956-57	Percent increase
Soil conservation districts -----	56	122	118
Acreage -----	8,152,669	37,697,019	362
Number of employees -----	2	8	300
Total expenditures -----	37,791	111,886	196

The table presented above does not provide good work load indices because it does not show the demands on the time of the existing three state soil conservation field personnel, who have not been able to provide the soil conservation districts with the administrative aid that the districts maintain that they need in the normal course of their activities. The U. S. Soil Conservation Service employees have been providing these nontechnical types of services to the districts, and therefore the correlation of soil conservation districts to the number of state employees as noted in the above table does not indicate a true evaluation of the work load involved.

Until the soil conservation districts cover the entire State and the work of the field men can be standardized to include only specific duties, no true evaluation of work load can be applied. The above table can only indicate the extent of the increase over the past nine years. The 37,697,019 acres of the state included in soil conservation districts at the present time represents only 37½ percent of the 100,353,920 acres within state boundaries.

The Legislature, in establishing a Division of Soil Conservation, introduced this organizational innovation into the soil conservation program of the United States. Limited observation discloses that California's structure in this activity is the only one of its type across the Nation, and already other states have indicated an interest in its relative success. For the most part the administration of soil conservation in the several states rests in the hands of a commission, and allocations

**Division of Soil Conservation—Continued**

are made to districts in a variety of ways. For instance, in Iowa the over-all district organization receives \$450,000 annually, with \$500 allotted each district and the remainder provided on a matching basis; in Louisiana the total allotted the districts is \$750,000, and Oklahoma has a program comparable to Louisiana.

In addition to the regular appropriation by the Federal Government for support of the Soil Conservation Service, a special appropriation is made annually to serve as an incentive to the several states for increased activity in the field of soil conservation. The amount provided each state depends directly on the size of the appropriation by the State to its soil conservation districts. To qualify for a part of this appropriation, California would be compelled to change its approach to district aid. Rather than provide the unique machinery of centralized cooperation at present in effect, the State would have to make direct grants in aid to the districts. The current year's special federal appropriation for this purpose is \$100,000, and since most of the states make direct grants to districts, logically only a relatively small amount of the special appropriation would be allotted to any individual state. Until an evaluation can be made of the system of soil conservation management in and by California or until the special federal appropriation would reach such a magnitude as to be clearly advantageous for the State to avail itself of the funds, we would recommend that no action be taken to change the existing state program purely to qualify for additional federal money.

In considering the current fiscal year budget, an expenditure per district of \$883 is indicated and that proposed for the budget year would evolve a figure of \$1,603 per district. It would seem that the federal law could be logically amended to include a system such as that in California, for the districts in this State will receive more personal services with consequent benefits than is afforded districts of most of the other states where an initial annual grant constitutes the major service of those states to their districts. Financially, California's expenditure per district, evolved by dividing the number of districts into the total budget, compares favorably with the average grant in aid afforded districts in the other states. For the reasons enumerated it is our feeling that the Federal Government should be apprised of the California program for possible inclusion in federal legislation so that this State may qualify for special appropriations.

The propriety of California's approach can be supported, inasmuch as it affords an integrated program with other natural resource agencies; it provides a logical and carefully screened approach toward creating a district, even though the steps for establishing a district appear somewhat cumbersome.

## Division of Soil Conservation—Continued

The estimate has been advanced by the division that by 1962 the soil conservation program will have encompassed the State with a total of 230 districts. This will require an addition of approximately 22 new districts per year for the next five years.

To absorb the additional work load, the division has presented a five-year plan. In some instances the plan provides for additional services to the districts, none of which appear in the budget proposal, and it also sets up a tentative schedule for specific work load positions. Specific phases of the program will be discussed in the Analysis.

The Soil Conservation Commission has been designated by the Governor as the state agency to survey and recommend on each small watershed development proposal made by local districts, the program which was enacted through the provisions of P. L. 566, Eighty-third Congress, as amended by P. L. 1018, Eighty-fourth Congress. The commission in turn has delegated the responsibility for making the investigations to the division. The division's five-year plan provides for two survey parties in Fiscal Year 1959-60 and more parties in subsequent years to fulfill its responsibility. Although the small watershed federal-state-local district cooperative program is innately beneficial, we feel that there are many problems to overcome before the State should authorize a high degree of participation in the activities proposed under P. L. 1018. California is one of the few states with such a high degree of activity in over-all state water planning, and incident to that planning there must be a completely correlated program of all watersheds and their management needs. All works of water conservation and runoff retardation, whether large or small, must complement each other, and it is conceivable that small watershed development independent of an integrated water plan could seriously complicate future developments. At best, if the commission made no recommendation relative to a proposed small watershed development under P. L. 1018, the project would be delayed only 45 days, the amount of time afforded the commission for action thereon, after which time, whether or not acted on by the commission, the project proposal may continue. By Chapter 4, Part 6, Division 6, of the Water Code (Chap. 1886, Stats. 1955) the Water Resources Board is not afforded the opportunity to officially review a project until the project has been completely processed by the Federal Government, at which time the board's duty is to determine the feasibility of the project on a cost-benefit basis, and request applicable state appropriation. Therefore, since the project extends beyond the purview of the Soil Conservation Commission and since serious complications can result from a lack of coordination of all agencies involved, we feel it is imperative that the Legislature critically review the interrelation of this program with the State Water Plan with an end toward possibly amending Chap. 1886, Stats. 1955, to insure that each project is compatible with the water plan, through critical review at its inception.

Division of Soil Conservation—Continued  
ANALYSIS

The division proposes to expend \$165,534 in the budget year, representing an increase of \$87,184 or 111.4 percent over that estimated to be expended in the current fiscal year. The increase, involving 12 proposed new positions, is almost entirely attributable to an increased level of service. It is true that a portion of the increase is related to work load inasmuch as the field representatives are working on a backlog of new district proposals and existing district boundary adjustments. However, each district will be afforded more intensive survey through more frequent field representative visitations which clearly represents an increased level of service. The new positions involved include eight additional associate soil conservationists, one senior soil conservationist, a delineator, an accounting technician III and a senior stenographer-clerk.

The basic purpose for requesting the eight associate soil conservationists is to relieve the U. S. Soil Conservation Service personnel of nontechnical functions within the districts so that they can perform the engineering and other related technical work for which they have been intended. No firm figure has been given as to the amount of such nontechnical work involved, nor as to how much impetus to district development will be afforded by providing the eight associate soil conservationists. However, field contacts have indicated that these field representatives proposed in the budget will fill the most critical need of the continuing soil conservation program in the State.

It is indicated that an attempt will be made to evaluate work load for application to subsequent requests by scheduling one representative per 10 soil conservation districts. In assigning the field men the division will consider other factors for controlling work load such as traveling distances, terrain, and relative activity within the districts. Since no assigned area will be saturated by districts, these field men will logically service all new district proposals and district additions within their prescribed boundary.

As the State becomes saturated with districts, organizing activities will decrease, but actual district servicing will increase and logically one responsibility will approximately offset the other. Whatever assignment is made of field representatives for area coverage, it will be an arbitrary one until the potential effectiveness of these men in accomplishing specific duties can be evaluated. We feel that the scheduling of eight men in the budget year is not excessive, but a thorough survey should be made of the types of activities engaged in by these men, the time absorbed per activity and the specific accomplishments achieved both in activities of state responsibility and the presumed increase of technical services by United States personnel, so that an appraisal can be made of the proper number of districts to be assigned to each field representative. Any fluctuation of this ratio can be easily adjusted in view of the rapid increase in the number of districts at the present time and at least for the next five years at which time, as was mentioned, it has been estimated by the division that the State will have been saturated by some 230 districts.

## Division of Soil Conservation—Continued

The proposed budget provides for a senior soil conservationist which is a new classification. This man is to be domiciled at Sacramento and, in effect, will be second in command or Assistant to the Chief of the Division. The majority of his time is to be utilized in the training of, and the supervision of the activities of, the field representatives. He will also be responsible for the coordination of the programs in and between the various area responsibilities of the field representatives as well as serve as liaison between other federal, state and local agencies involved in the general field of soil conservation. Considering the necessity for coordinating the activities of the proposed 11 associate soil conservationists and the important aspect of relieving the Chief of routine duties, we recommend this position of Senior Soil Conservationist be allowed.

A time consuming activity which serves as a deterrent to the pursuing of more important duties by the field representatives is that of detail mapping of boundaries for proposed districts and changes in delineation of existing ones. The proposed budget provides for a delineator classification to accomplish this routine but necessary function, and because of the obvious resultant increase in the effectiveness of the field representatives by relieving them of this particular work load we recommend approval of this position.

Because of the increase in the business and accounting load of the division which will logically follow the expanded field activities, the proposal of the division for an accounting technician III appears justifiable. At the present time the secretary to the Soil Conservation Commission, whose position also appears in the support budget, has been performing the limited accounting activities of the division in its present form. Obviously, by relieving the secretary of the bookkeeping duties, his work load will decrease. Also, prior to the establishing of the division by the Legislature in 1955, the secretary to the commission performed administrative duties of which he has subsequently been relieved. By these changes, both in accounting and administrative duties, the responsibilities of secretary to the commission have decreased in scope, and because of the senior pay scale classification originally assigned this position and similarly carried over into the present organization, it is recommended that a reappraisal be directed toward a possible reclassification.

The division is also requesting a senior stenographer-clerk position to augment its present complement of one intermediate stenographer-clerk and two intermediate typist-clerks. The budget indicates only one intermediate typist-clerk and one junior intermediate typist-clerk, however, a recent reclassification of the latter position has elevated it to an intermediate level. The senior stenographer-clerk position was originally proposed in conjunction with a proposed increase of one intermediate stenographer-clerk and four intermediate-typist-clerk positions. However, the final proposal eliminated the five latter positions. The position justification for the senior classification indicates that

## Division of Soil Conservation—Continued

that position is for dictation and transcription, answering correspondence, preparing reports, interviewing visitors, and related activities. In relieving the commission secretary of fiscal accounting duties and allowing the position of an accounting technical III, we feel that all duties proposed for the new stenographer position can be handled by the existing and approved complement, inasmuch as a currently employed stenographer can perform work requiring dictation. *We therefore recommend that the position of senior stenographer-clerk be deleted from the proposed budget for a saving of \$3,900 in salaries and \$462 in equipment, or a total savings of \$4,362.*

We recommend approval of this item in the amount of \$161,172.

## Soil Conservation Development Fund

This fund was created through the provisions of Chapter 1032, Statutes of 1949, subsequently amended by Chapter 1210, Statutes of 1953 and Chapter 1680, Statutes of 1955. The intent of the Legislature by its appropriation of \$1,000,000 to the Soil Conservation Development Fund was to make available to soil conservation districts a convenient medium for the rental-purchase of necessary equipment for the land development within the district boundaries.

Although the fund expenditure proposal for the budget year involves only a single budget item appropriation, that being for the Pleasanton Nursery which will be considered separately, we feel there are certain problems concerning the fund involving policy decisions which should be considered.

The \$1,000,000 establishing the fund was an initial General Fund appropriation with the provision that the money would constitute a revolving fund. Any withdrawals from the fund, whether for outright purchase of equipment by or for the districts, or for financing repairs to equipment acquired independently by the districts, is to be repaid to the fund in increments, the size of which is determined by the estimated life of the equipment and the estimated hourly usage per annum applied against the total outlay per equipment item. To the resultant figure is added a set amount of 5 percent per year of the total cost of the equipment to defray pro-rata administrative charges for business and accounting functions applicable to the actual operation of the fund by the department.

We do not feel that the intended use of this fund has met with any great degree of success. At the present time, only 25 percent of the districts contract with the State for use of the fund for a total current withdrawal of \$259,160, of which *\$252,460 represents contracts on which payments were in arrears as of November 30, 1956, including \$80,160 representing the liability of one district.*

We do not discount the value afforded soil conservation progress within the State even by such a small usage of the fund, but because of the inability of the department to administer the fund on a sound business-like basis, because of the inequities in setting equipment rentals resulting from the often mistaken estimates of annual equip-



**Soil Conservation Commission—Continued**

ment usage, and finally because of the high administrative charge which must of necessity be applied to the contracts, we recommend that the Soil Conservation Development Fund be changed from the "purchase-rent" function it performs at present to a purely lending revolving fund with the going bank rate of interest applied on each contract. These loans would be for the purpose of purchasing equipment and would be repaid from charges to users. For the life of the contracts the districts would pay less money than under the present system of payments based on equipment usage, however, they would generally be required to complete payment of the equipment in a shorter period of time for the same reason. If the Legislature approves the fund transition as recommended, it is further recommended that the associate equipment engineer position carried under the Soil Conservation Development Fund be transferred to the support budget of the Division of Soil Conservation, where he could continue his present duties as well as being advantageously integrated into other support operations of the division.

In the budget year fund expenditure proposal, \$7,796 is allotted for the administration of the fund, \$4,935 representing that amount incurred by the department administration and \$2,861 by the division. We recommend that \$2,500 be allotted the department to administer the proposed lending fund, such allotment to be appraised after a period of trial time to ascertain the actual need. Since the division is reimbursed by the department for its services to the fund, this reimbursement would cease. The secretary to the commission who performs this work for the division, as well as typist-clerk time allotted therefor, would be released to perform other duties.

We feel that our recommendation to convert the development fund from its present use to that of purely a lending function would eliminate the many existing problems and would be beneficial both to the State through reduced administrative charges as well as to the districts through reduced over-all equipment costs.

**Department of Natural Resources****SOIL CONSERVATION COMMISSION**

ITEM 199 of the Budget Bill

Budget page 766

Budget line No. 23

**FOR SUPPORT OF ALLOTMENT TO SOIL CONSERVATION SERVICE FOR PLEASANTON NURSERY FROM THE SOIL CONSERVATION DEVELOPMENT FUND**

Amount requested .....	\$30,000
Estimated to be expended in 1956-57 Fiscal Year .....	30,000

Increase .....	None
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**RECOMMENDATIONS**

Amount budgeted .....	\$30,000
Legislative Auditor's recommendation .....	30,000

Reduction .....	None
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## Soil Conservation Commission—Continued

## ANALYSIS

Following a decrease in 1954 of allocations to the Pleasanton Nursery by the Soil Conservation Service, which agency initially defrayed the total expense of that installation, the State began in the 1954-55 Fiscal Year an annual allotment to the nursery operation to insure its continuing service to the State.

The products of the nursery are foundation stock seeds which are released to individual districts without charge. Cooperators plant and tend the resulting crops, 80 percent of which must be made available at a reasonable price to other interested factions with the primary purpose to divert such production eventually into marketing channels. To date, the program has been a successful one, having resulted in the production and subsequent availability to the public of several beneficial strains of grasses.

We feel that this program is beneficial to the soil conservation program within the State and therefore recommend approval of the item as budgeted.

## DEPARTMENT OF PUBLIC HEALTH

ITEM 200 of the Budget Bill

Budget page 768

Budget line No. 62

FOR SUPPORT OF DEPARTMENT OF PUBLIC HEALTH FROM THE  
GENERAL FUND

Amount requested .....	\$5,282,083
Estimated to be expended in 1956-57 Fiscal Year .....	4,808,524
Increase (9.8 percent) .....	\$473,559

## Summary of Increase

	Total increase	INCREASE DUE TO		Budget Line page No.	
		Work load or salary adjustments	New services		
Salaries and wages .....	\$74,898	— \$88,626	\$163,524	794	54
Operating expense .....	153,025	83,307	69,718	794	55
Equipment .....	15,542	10,082	5,460	794	56
Plus decreased reimbursements ..	87,728	87,728	—	795	12
Plus decreased federal aid .....	142,366	142,366	—	769	32
Total increase .....	\$473,559	\$234,857	\$238,702	769	13

## RECOMMENDATIONS

Amount budgeted .....	\$5,282,083
Legislative Auditor's recommendation .....	5,134,968
Reduction .....	\$147,115