



A Review of the Department of Fish and Game

Issues and Options for Improving its Performance

EXECUTIVE SUMMARY

For years, the Department of Fish and Game (DFG) has been plagued by chronic management and fiscal problems. In the Supplemental Report of the 1990 Budget Act, the Legislature directed the Legislative Analyst's Office to conduct this study so as to provide some background about and guidance in solving the DFG's fiscal and other problems. In it, we focus on three key issues that we found hamper the department's performance. These issues include: (1) the lack of clarity of the department's mission, (2) organizational problems, and (3) fiscal concerns.

Regarding its mission, the DFG historically has provided services and programs primarily for those that use or consume the state's wildlife and natural habitat resource, such as individuals who hunt and fish. As California's population has grown, leading to increasing urbanization, this traditional constituency group of the DFG has diminished steadily. Meanwhile, the responsibilities of the DFG relating to general habitat protection and endangered species protection have increased, requiring the DFG to expand services and programs that protect the overall resource base. Today, the department's mission statement reflects this dual and sometimes conflicting role. What is lacking, however, is a clear focus on exactly what the DFG's relative priorities are, and thus how it should allocate its fiscal resources among its competing objectives.

Regarding organizational problems, the DFG's organizational structure has drifted gradually away from its original, decentralized form to a more centralized organization. Communication problems pervade the organization, as staff struggle with balancing directives from headquarters and those from regional managers. These communication problems hamper the effectiveness of staff to implement programs.

Regarding fiscal concerns, the demographic changes that have affected the DFG's role over time also have translated into a significant change in the DFG's funding base. Whereas in the late 1950s hunting and fishing license buyers contributed nearly 100 percent of the revenues used to fund the DFG,

EXECUTIVE SUMMARY CONT'D

today these individuals contribute barely half. Replacing these sources are increasing amounts of environmental funds, such as the Environmental License Plate Fund and the Public Resources Account (Proposition 99). The DFG's fiscal problems include short-term difficulties in accurately estimating revenues, and a longer-term problem in that anticipated future revenues will be insufficient to keep pace with projected program demands. In addition, complex statutory and constitutional restrictions limiting the uses of the department's own special funds serve to distort the budgeting process and obstruct effective policy implementation. For example, some programs are funded because they have a special fund dedicated for that program's purpose, while other programs fail to receive funding due to a lack of a dedicated fund source, even if the unfunded programs are of a higher priority .

In order to address the DFG's fiscal and other problems, the Legislature and the administration should take a number of steps. Specifically:

- The Legislature should reconcile the dual missions that the DFG currently tries to implement simultaneously, setting a clear policy of priorities for those times when the resource use and the resource protection missions conflict.*
- The DFG should re-evaluate how it structures its organization and allocates staff.*
- The DFG should continue to make improvements in its revenue-estimating methodologies in order to avoid proposing the expenditure of funds not likely to materialize, thus creating short run "fiscal crises".*
- The Legislature should, when appropriating funds for support of the DFG's programs, establish a policy of (1) considering the level of uncertainty in the department's revenue estimates and (2) establishing prudent reserves which reflect the level of uncertainty of these estimates.*
- The Legislature should consider a number of options to address the DFG's long run fiscal problem of program demands exceeding available resources. For example, it could (1) reduce workload by eliminating or reducing some DFG operations, (2) expand the DFG's financial resource base, through greater use of broad-based funding and/or various user fees or "impact fees," and (3) improve the allocation of available resources through better priority setting.*
- The DFG should institute a planning process in order to determine long-term objectives and set annual program priorities.*
- The Legislature should (1) continue to support departmental operations primarily from special funds and (2) repeal various overly narrow statutory and constitutional constraints currently placed on the use of these funds. In combination with the previous step, this would enable the Legislature to establish priorities for the department and then fund the highest priorities first.❖*

INTRODUCTION

CHRONIC PROBLEMS HAVE PLAGUED THE DEPARTMENT

For years, the Department of Fish and Game (DFG) has undergone close scrutiny by both the Legislature and various state administrative control agencies in response to chronic management and fiscal problems that have plagued the department. Although this attention has led to periodic reforms in an attempt to address these issues, the department continues to have problems. In recent years, for example, the Legislature has been faced with a recurring annual problem of shortfalls in the revenues available to support the department's proposed budgets. Moreover, several plans previously adopted by the Legislature to provide new funding for the department have fallen well short of their initial revenue goals.

PURPOSE OF THIS ANALYSIS

In the Supplemental Report of the 1990 Budget Act, the Legislature directed the Legislative Analyst's Office to conduct a study that would provide some background about and guidance

in solving the DFG's fiscal and other problems. This Special Study has been prepared in fulfillment of that requirement. In it we (1) provide necessary background information about the DFG, (2) explore some of the causes of the apparent mismatch between program requirements and funding at the DFG, and (3) offer some avenues by which the Legislature could pursue resolution of the DFG's fiscal and other problems. We do not attempt to evaluate all of the major programs of the DFG, or offer a specific proposal for an institutional reorganization. Rather, we focus on the fiscal and various other aspects of the DFG's problems and, where possible, identify the fundamental policy issues the Legislature must resolve prior to implementing any funding and organizational solutions aimed at improving the DFG's efficiency and effectiveness.

In order to properly set the stage for this analysis, it is first important to provide background information regarding the Department of Fish and Game, especially regarding those factors which most appear to underlie the DFG's basic problems. This section provides this basic background information.

GENERAL BACKGROUND ON THE DEPARTMENT OF FISH AND GAME

KEY FACTORS UNDERLYING THE DEPARTMENT'S TROUBLES

As noted above, in order to identify possible reforms that offer potential for providing long-term relief to the DFG's fiscal and other prob-

lems, some of the key factors underlying the DFG's troubles need to be highlighted. Although many factors have led to the ongoing fiscal problems and other troubles facing the department, three major factors stand out. These include: (1) decline in the DFG's traditional constituency, (2) increased responsibili-

ties imposed on the DFG by the Legislature in response to growing demographic and environmental pressures on wildlife and natural habitat, and (3) constitutional and statutory restrictions on the use of the funds available to the DFG.

Decline in the DFG's Traditional Constituency

Historical perspective. The DFG can trace its roots back to 1870 when the Legislature created the Board of Fish Commissioners to provide for the restoration of fish in California waters. Initially focused on planting imported fish and operating hatcheries, the commissioners' authority was soon expanded to regulate hunting methods. By 1951, the Legislature expanded the scope of this original commission and created the present Department of Fish and Game. The major constituency groups of the DFG at that time included: sportsmen and commercial fishermen who derived direct long-term benefits from the department's activities; agricultural interests who relied on the DFG to mitigate damage to crops by migratory waterfowl and killing of livestock by mountain lions and other wild animals; and conservationists who were concerned generally with preventing the wholesale destruction of the state's wildlife resources. The department's major responsibilities initially included: enforcement of state fish and game laws; importation and propagation of fish and game; the establishment and maintenance of fish hatcheries; the operation of game farms, game management areas, and public shooting grounds; the control of predators; and research to support the above work.

Changes have taken place. Since those early days, many changes have taken place in the state. Figures 1 and 2 provide summary information on the apparent decline in hunting and fishing over the past decade and identify some of the likely causes for these changes. Figure 3 (next page) graphically illustrates the steady decline in fishing. The trend is especially striking when considered in the context of an ever growing population -- not only have the numbers of Californians hunting and fishing fallen

Figure 1

Changes in Hunting in California



Hunting Has Declined Significantly Since 1980

- From 1980 to 1989, the sale of hunting licenses decreased by 26 percent.
- In 1988-89, about 400,000 hunters (1.4 percent of the state's population) bought hunting licenses. This compares to 560,000 hunters (2.4 percent of the population) in 1980.



Possible Reasons for Declining Interest in Hunting

- Decreasing wildlife populations due to loss of open land.
- Declining rural population.
- Changes in cultural attitudes.
- High total costs (including expenses for licenses, equipment and transportation) for hunting activities.



Environmental Review Process Affects Hunting

- State Supreme Court decision in *Wildlife Alive v. Chickering* (1976) subjected the department's hunting season regulations to CEQA.
- Subsequent lawsuits showed that the department's environmental review was inadequate, resulting in the suspension of several hunting seasons.

“Not only have the numbers of Californians hunting and fishing fallen as a proportion of the overall population, but they have fallen in absolute terms as well.”

as a *proportion* of the overall population, but they have fallen in *absolute terms* as well.

Why has this decline occurred? A variety of complex and interconnected issues have contributed to this decline. For example, population growth and increasing urbanization have put pressure on the habitat which in turn has reduced the availability of fish and game species, particularly near urban centers. As a result, hunters and fishers must travel farther to enjoy good hunting and fishing opportunities, thereby incurring greater time and expenses. Likewise, demographic changes in the state’s population have given rise to a greater diversity of recreational interests causing hunting and fishing to face greater competition from recreational opportunities closer to home. Such factors suggest that the decline in hunting and fishing is (1) largely beyond the ability of the DFG to control and (2) unlikely to reverse itself in the foreseeable future. These declines have significant fiscal implications for the DFG because historically the department has relied heavily upon fees collected from hunters and fishers for a substantial portion of the DFG funding base.

Figure 2

Changes in Sport and Commercial Fishing in California



Overall, Sport Fishing Has Declined Significantly Since 1980

- From 1980 to 1990, the sale of yearly resident inland fishing licenses decreased by 29 percent.
- In 1989-90, about 1.6 million fishers (5 percent of the state’s population) bought yearly resident fishing licenses. This compares to 2.3 million fishers (10 percent of the state’s population) in 1980.
- Some of this decline has been offset by increased sales of the new yearly resident ocean fishing license and one-day inland fishing license.



Possible Reasons for Declining Interest in Sport Fishing

- Changing state demographics.
- Recent drought conditions.
- Increased cost of fishing licenses over time (for example, a yearly resident inland license now costs \$22.50 compared to \$5.75 in 1981).



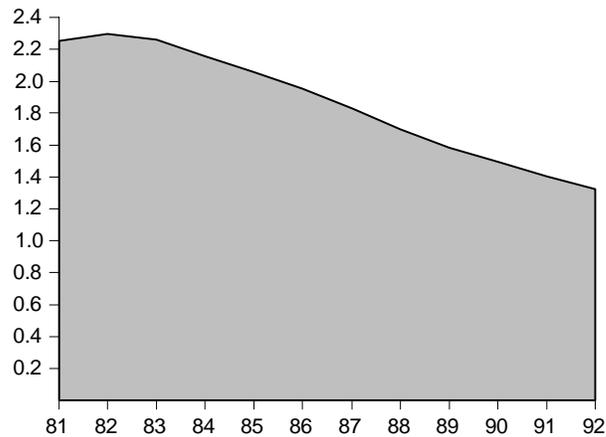
Overall, Commercial Fishing Has Changed Significantly Since 1976

- From 1976 to 1989, the total number of pounds of commercial fish landed in the state declined by 47 percent.
- A major reason for this drop has been the decline of the tuna and anchovy fisheries in the state.
- During this same period, the number of commercial fishers has fallen from over 20,000 to about 15,000, a decrease of 25 percent.
- Catches of some specific fisheries, such as sea urchin, have increased in recent years due to the development of export

“The Legislature has gradually broadened the scope of legal responsibilities the DFG must uphold, including increasing responsibility for nongame programs and for general environmental protection.”

Figure 3

**Department of Fish and Game
Resident One-Year Fishing License Sales
1981 through 1992 (in millions)**



Increasing Responsibilities Borne by the DFG

The second key factor underlying the DFG’s difficulties relates to the increased responsibilities that have been given to it over time.

While the DFG has found its traditional recreation base steadily eroding over time, the Legislature has gradually broadened the scope of legal responsibilities the DFG must uphold, including increasing responsibility for nongame programs and for general environmental protection. Figure 4 details the evolution of this broadened mission.

Sufficient funding has not always been provided. As can be seen in Figure 4, since 1960 new laws have required the DFG to broaden its focus to include programs that protect rare, threatened and endangered species, and engage in public education programs for all Californians, including “nonconsumptive users” (that is, individuals who enjoy fish and wildlife but choose not to hunt or fish).

Adjusted for inflation, the department's expenditures grew by 62 percent during the 1980s. Despite this, funding has not kept pace with program demands.

In general, the Legislature has recognized that the department could not perform these expanded responsibilities solely with its historical level of resources. Consequently, resources have been expanded over time. Ten years ago, in 1981-82, the DFG received \$61 million and employed 1,494 personnel years. The 1991-92 Budget Act provides the DFG with \$152 million and roughly 1,850 personnel years with which to implement a broad range of support and capital outlay activities. Adjusted for inflation, the change in funding represents a 62 percent growth during this 10-year period.

Despite the past funding increases provided to the department, however, the legislation

Figure 4

Department's Evolving Responsibilities for Nongame Wildlife and Environmental Protection



Early Evolution

- Establishment of game refuges provided protected habitat for nongame as well as game species.
- Early laws designated protected species: for example, sea lions (1865) and certain species of birds, fish and mammals (1933).



Evolution of Responsibilities Since the 1960s

Protection and restoration of threatened and endangered fish, wildlife and native plants; management of endangered and other nongame species:

- Creation of Special Wildlife Investigations program (1968).
- Ecological Reserve Act (1968)
- California Species Preservation Act (1970)
- Endangered Species Act (1970)
- Statutory restrictions on possession and transportation of live wild animals (1974)
- Cooperative agreement with the U.S. Fish and Wildlife Service under the 1973 federal Endangered Species Act (1976)
- California Native Plant Protection Act (1977)
- Establishment of the Natural Heritage Division (1989)

Acquisition and management of lands to protect threatened and endangered species and unique ecosystems:

- Wildlife Conservation Act (1947); established the Wildlife Conservation Board to acquire and develop wildlife resources and provide public recreational access
- Ecological Reserve Act (1968)
- Creation of Significant Natural Areas Program (1981)

Public education and other services for "nonconsumptive users":

- Native Species Conservation and Enhancement Act (1974)
- Project WILD for K-12 students (1983)
- California Wildlands Program (1989)

CONTINUED ON
NEXT PAGE

implementing many of these added responsibilities did not include specific funding mechanisms to implement the measures, thus requiring (1) the Legislature to apportion scarce existing resources to support the new activities at the expense of other spending needs, or (2) the DFG to shift priorities and fund the new workload from its existing funding base. For example, implementation of the California Environmental Quality Act of 1970 (CEQA) imposed substantial (and steadily increasing) workload demands on department staff by requiring the department to review and comment on all development projects that could have a deleterious impact on fish and wildlife and their habitat. In order to meet this workload requirement, the DFG redirected the time of some fish and wildlife biologists away from traditional research and monitoring activities and towards reviewing development projects. The CEQA-related workload has risen dramatically as development pressures in the state continue to mount, particularly in areas like the Sierra foothills that provide extensive habitat to fish and wildlife and that are developing rapidly.

Figure 4 - CONTD



Evolution of Responsibilities Since the 1960s - CONTD

Review of environmental impact reports (and functional equivalents) under CEQA:

- California Environmental Quality Act (1970)

Protection and acquisition of water resources for fish and wildlife:

- Water project review and planning:
 - Creation of the Water Projects Branch, pursuant to federal law (1959)
 - Davis-Dolwig Act (1961)
 - Porter-Cologne Act (1969)
- Instream flow protection:
 - Recommendation process for state water board permit applications
 - Appellate court decision in *Cal Trout et al. v. Superior Court of Sacramento County* (1990)
 - Water Rights Permitting Reform Act (1988)
- Water habitat protection:
 - California Coastal Act (1976)
 - Suisun Marsh Preservation Act (1977)
- Stream protection:
 - Streambed alteration notification (1961)
 - Streambed alteration agreements (1970)
- Water quality protection:
 - Creation of the Water Projects Branch (late 1950s)
 - Fish and Wildlife Water Pollution Control Laboratory (1967)
 - Porter-Cologne Act (1969)
- Oil spill prevention and response:
 - State Oil Spill Contingency Plan; State Interagency Oil Spill Committee chaired by the department (mid-1970s)
 - Oil Spill Prevention and Response Act (1990)
- Water rights acquisition

Limits on the Use of Available Funds

A third key factor underlying the DFG's troubles relates to the constraints imposed on how its resources can be used.

Where do the department's revenues come from? Since the 1950s, the sources of funds for the DFG have changed significantly. Figure 5 compares the DFG's funding sources in 1958-59 to 1991-92. As the figure shows, the proportion of the DFG budget that comes from hunting and fishing licenses and taxes has declined significantly over time. Whereas in 1958-59, the DFG was entirely dependent on this revenue source, in 1991-92, only slightly more than half of the budget will come from these license revenues and taxes, including federal excise taxes on hunting and fishing equipment. The remainder will come from a variety of fund sources including taxes on crude oil, cigarette taxes (Proposition 99), personalized license plates, and the General Fund.

In the past, the department has successfully argued for hunting and fishing fee increases to (1) compensate for inflationary cost pressures, and (2) make up for revenue losses resulting from sales of fewer licenses. Although

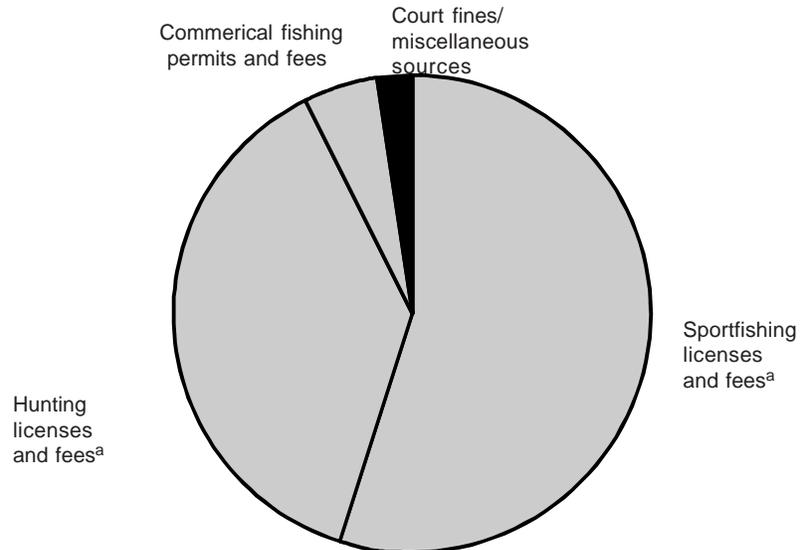
fee increases during the mid-1980s went beyond compensating for inflation and funded program growth, it is highly doubtful that the DFG will be able to maintain that level of revenue in the future, given the socioeconomic changes in the state's population as discussed earlier in this analysis. In fact, there is evidence to suggest that the higher the level of fees, the more future fee increases will contribute to a further reduction in license sales. License sales revenues currently are dropping in *real* (inflation-adjusted) terms and may, in the future, drop in *nominal* terms as well. Thus, this fund source can no longer be relied upon as the principal source of income for this department in the future. Nevertheless, as Figure 6 (next page) shows, there has been pressure to increase DFG funding and the department's budget has been increased fairly steadily in recent years, even after adjusting for inflation. To accomplish this and mitigate the erosion of the department's traditional funding base, the Legislature has appropriated a number of different fund sources for support of the DFG's programs.

The department's funding for 1991-92. In the 1991-92 budget the DFG will spend funds from over ten different sources totalling \$152 million. These funds include:

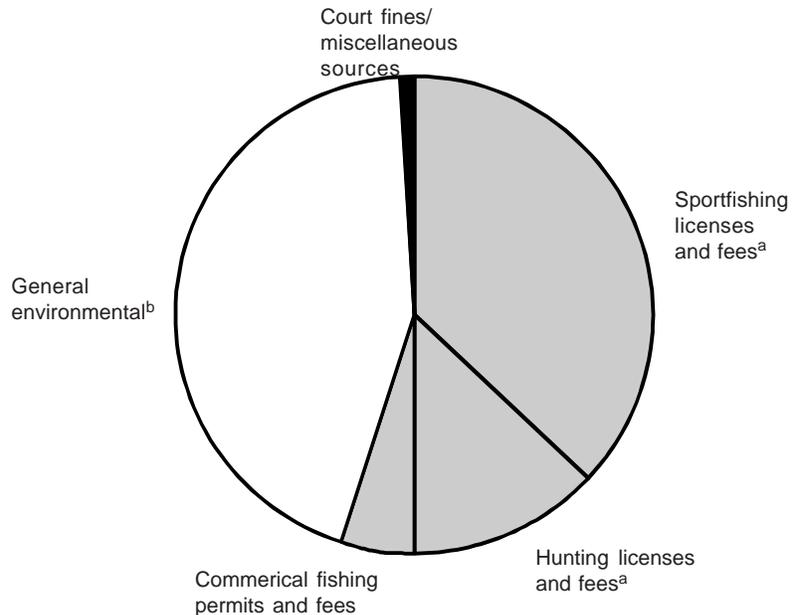
Figure 5

Department of Fish and Game Comparison of Sources of Funding Over Time

1958-59 and 1991-92



1958-59



1991-92

^a Includes federal excise tax revenues.

^b Includes, among other things, Oil Spills Prevention and Administration Fund, Environmental License Plate Fund, Public Resources Account (Proposition 99), developer fees (AB3158), and General Fund.

Source: 1958-59 data from Department of Fish and Game report to the Governor, 1959. 1991-92 data from 1991 Budget Act, 1991-92 Governor's Budget, and DFG.

“License sales revenues currently are dropping in real (inflation-adjusted) terms and may, in the future, drop in nominal terms as well.”

- **Statewide hunting and fishing revenues (\$64 million).** These revenues are deposited in the Fish and Game Preservation Fund (FGPF) and are made up of revenues from hunting and fishing licenses as well as commercial fishing permit fees. The funds in the FGPF are divided into (1) the *nondedicated* account, which may be used for a variety of hunting and fishing programs and (2) a series of *dedicated* accounts, which may be used only for specific purposes related to the special stamps and permits that fund the dedicated accounts.

- **A variety of “general environmental funds” (\$43 million).** These funds include, among others, the Environmental License Plate Fund (ELPF -- \$12.3 million), the Public Resources Account (PRA -- \$4.4 million), the Oil Spill Prevention and Administration Fund (\$14.7 million), Proposition 70 of 1988 (\$3.2 million), and a new fee totalling \$4.3 million imposed on developers by the Legislature in Ch 1760/90 (AB 3158, Costa).

- **Federal funds (\$25 million).** Most of the federal funds available to the DFG come from excise taxes levied on hunting and fishing equipment. In addition, the U.S. Army Corps of Engineers and the Bureau of Land Management provide funds for mitigation hatcheries. A small amount of funding comes from federal Endangered Species Act funds, but not on a consistent ongoing basis.

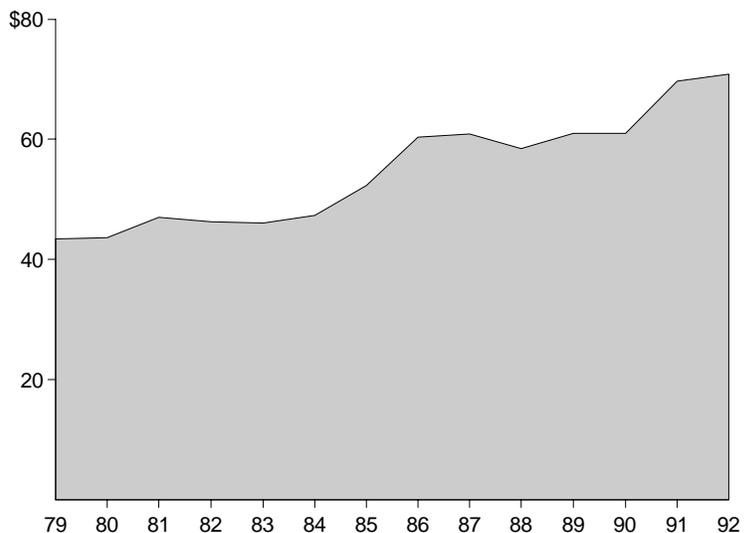
In addition to the special and federal fund sources discussed above, the DFG will receive approximately \$4 million from the General Fund and \$16 million in reimbursements in 1991-92.

As workload demands mount and new programs come into place, the trend toward diversification of fund sources will undoubtedly continue during the next decade, gradually further lessening the relative importance of hunting and fishing license revenues to the department’s revenue base.

Figure 6

Department of Fish and Game Annual Expenditures^a

**All Fund Sources (in millions)
1978-79 through 1990-91**



^a Data are adjusted for inflation using constant 1978-79 dollars, include reimbursements, and are for fiscal years ending in years shown.

Figure 7

Department of Fish and Game Constraints on Legislative Flexibility

California Constitution, Article 16, Section 9:

"Money collected under any state law relating to the protection or propagation of fish and game shall be used for activities relating thereto." (Added November 5, 1975 by Proposition 8)

Fish and Game Code Section 711:

"It is the intent of the Legislature to ensure adequate funding from appropriate sources for the department. To this end, the Legislature finds and declares that:

(a) The costs of nongame fish and wildlife programs and free hunting and fishing license programs shall be provided annually in the Budget Act by appropriating money from the General Fund and sources other than the Fish and Game Preservation Fund to the department for these purposes.

(b) The costs of commercial fishing programs shall be provided solely out of revenues from commercial fishing taxes, license fees, and other revenues, and from reimbursements and federal funds received for commercial fishing programs.

(c) The costs of hunting and sportfishing programs shall be provided solely out of hunting and sportfishing revenues and reimbursements and federal funds received for hunting sportfishing programs. These revenues shall not be used to support commercial fishing programs, free hunting and fishing license programs, or nongame fish and wildlife programs." (Added by Statutes of 1978, Chapter 855, AB 3416, Gualco)

Many funding restrictions exist. This department, primarily funded from special funds, faces an intricate and complex set of restrictions regarding how its funds must be used. Figure 7 summarizes the most significant of the restrictions on the DFG's use of its major fund source, the FGPF.

As Figure 7 shows, *constitutionally* the department must use money collected from hunters and fishermen to support programs benefiting game species of fish and wildlife. This generally has been interpreted by the department to mean programs that focus largely on species of fish and wildlife that can be hunted or fished, such as hatchery operations. The rationale for the constitutional restriction on the use of the department's hunting and fishing license revenue appears to be a widely held belief by hunters and fishers that, historically the only money spent by the state to benefit hunting and fishing interests was the license revenue. Consequently, they saw strong reason to protect this source of support from being used for other state purposes. In fact, however, it appears that other state funds are providing a substantial portion of the support for hunting and fishing programs. Currently hunters and fishers actually receive extensive levels of service from a variety of fund sources. Included among these services is the Wildlife Conservation Board

"As workload demands mount and new programs come into place, the trend toward diversification of fund sources will undoubtedly continue during the next decade, gradually further lessening the relative importance of hunting and fishing license revenues to the department's revenue base."

which spends \$750,000 per year from horse racing fees (which otherwise would go to the General Fund), as well as multi-million dollar outlays of general obligation bonds for land

“ . . . today hunters and fishers pay for only a portion of the hunting and fishing opportunities provided them by the state.”

acquisitions, most of which are designated for wildlife areas open for consumptive uses. The principal and interest expenses for these purchases are paid by the General Fund and thus taxpayers generally. In addition, large sums of money from the State Water Project have been expended over the years for hatcheries.

Overall, it is not clear exactly how much of total state expenditures beneficial to fish and game currently are actually contributed by their direct beneficiaries. In a 1964 study conducted by the Legislative Analyst’s Office, the available data at that time suggested that only about half of the total state expenditures for programs beneficial to fish and game were derived from hunters and fishers. Given (1) the recent increase in bond expenditures, (2) the increase in the variety of new fund sources allocated to the DFG, and (3) the gradual decline in hunting and fishing revenues, it is safe to say that today hunters and fishers pay for only a portion of the hunting and fishing opportunities provided them by the state.

There are also *statutory restrictions* on the use of the FGPF. Specifically, the department cannot use nongame monies, or monies derived from sources other than federal funds and hunting and fishing revenues, to support hunting and fishing programs. Thus, the department theoretically must maintain “closed loops” for funding its programs — (1) the bulk of the FGPF may be used only for hunting and fishing

programs and (2) no other funds (with the exception of federal funds) may be used to fund hunting and fishing programs. These other funds must be used for general environmental and nonconsumptive programs.

In addition to the above restrictions on the use of the FGPF, the department also must manage its programs within the statutory restrictions placed on the use of its other major fund sources including the ELPF and the PRA (Proposition 99). For example, the PRA must be divided equally among programs and projects across state agencies that benefit fish, waterfowl and wildlife. Existing law further requires that the DFG use PRA funds only to *supplement* programs, not to supplant existing fund sources. This has the effect of constraining the department’s flexibility in allocating its baseline expenditures if it is going to maximize the use of PRA funds.

Finally, the department receives funds from 18 different special *dedicated accounts*. Each of these accounts derives its revenues from a spe-

“ . . . the various intertwined funding restrictions facing the DFG can serve to invert the budget process.”

cific group of individuals and each account must be spent in a narrowly defined manner, as established in the enabling legislation and implemented through the efforts of various advisory committees. Examples of dedicated accounts include the Herring Tax Dedicated Account, the Augmented Deer Tags Dedicated Account, and the Private Wildlife Areas Dedicated Account.

Efficient allocation of resources can be impaired. As discussed below in greater detail, the various intertwined funding restrictions facing the DFG can serve to invert the budget process. Normally, for departments supported by funds

“The DFG’s funding restrictions tend to constrain both the executive branch as well as the Legislature in exercising their responsibility to set priorities based on actual program needs.”

which are relatively unrestricted in their uses — for example, General Fund departments — the Legislature first establishes priorities and then funds the priorities to the extent that funds are available. In the DFG, on the other hand, we have found that the requirements that funds be used for specified purposes tends to dictate the Legislature’s priorities. This means that there may be certain activities which are urgent and pressing but may lack available funds, thus

precluding their implementation. Thus, the DFG’s funding restrictions tend to constrain both the executive branch as well as the Legislature in exercising their responsibility to set priorities based on actual program needs.

With this general overview and background information in mind, we now turn to a more detailed examination of the DFG and its problems. We first discuss in more detail the issue of what the DFG’s mission is. We then examine how effective the DFG is in meeting its objectives, and what the issues, options, and strategies are for improving its effectiveness.

During our review of the department’s programs and policies, we focused on three broad issue areas that we found hamper the DFG’s efforts to meet its objectives. These issue areas, which our analysis indicates clearly warrant attention, include: (1) the need for greater clarity of mission, (2) organizational issues, and (3) fiscal issues.

THE EFFECTIVENESS OF THE DFG: HOW WELL DOES IT MEET ITS OBJECTIVES?

WHAT IS THE DFG’S MISSION?

As one of the oldest agencies in state government, the DFG has evolved slowly over the past century. Over the years, the department has struggled to develop a mission and identity consistent with the needs of the state as the state changes and grows, and to develop programs and policies to achieve its mission. Today the DFG essentially has a dual mission. First, there is its *historical* mission of promoting and regulating traditional resource use activities such as hunting and fishing for a game species. Examples of programs and activities supporting this mission include operating fish hatcheries and supervising and managing hunting

events. Second, there is the department’s *newer focus* of promoting resource protection for all California native plants, fish and wildlife through such programs as reviewing the impact of development on habitat and maintain-

The issue areas clearly warranting attention include: the need to reconcile the dual mission of the DFG; various organizational problems; and fiscal issues.

“In actual practice, the dual missions of the DFG can in many instances both be met through the same programs . . . however, some activities that promote one objective can conflict with and undermine efforts to promote the other.”

ing a centralized data base on threatened, rare, and endangered species. The key to evaluating the DFG involves assessing (1) its effectiveness in succeeding in its dual mission and (2) how its effectiveness can be improved.

The Basic Problem — Balancing Different Objectives

Both of the dual objectives of the DFG — resource use and resource protection — are reflected in the department’s mission statements over the past decade. For example, the 1991-92 Governor’s Budget stated that the mission of the DFG is “to ensure that fish and wildlife are preserved to be used and enjoyed by the people in the state, now and in the future,” suggesting the DFG gives equal weight to protection and use activities. Given the competition among the department’s programs for scarce financial resources, however, some of these activities receive more funds and attention than others, thereby taking implicit priority over these other activities. Recently, the DFG widely circulated to interested parties a new draft mission “to ensure that California’s wildlife resources flourish in their natural habitats — first for their intrinsic and ecological values, and second, so that they can be enjoyed by the

citizenry of this state now and in the future.” This draft (1) recognizes that conflicts may exist between resource protection and resource use activities and (2) establishes priorities for these activities by placing ecological values *above* use values. It is our understanding, however, that the department now is considering modifying this draft statement to remove the explicit priorities, leaving the DFG with much the same mission statement and dilemma as before — that is: what specific criteria should the department meet in allocating scarce dollars between programs primarily focused on resource use versus programs primarily focused on resource preservation?

Different Objectives May Conflict

In actual practice, the dual missions of the DFG can in many instances both be met through the same programs. For example, activities that protect or restore habitat for the maximum diversity of species can further the objectives of both resource protection and resource use. Since game and nongame species coexist in habitats, protection of habitat or restoration of native habitat improves the ecological health of the area as well as providing better hunting and fishing opportunities.

In other cases, however, some activities that promote one objective can conflict with and undermine efforts to promote the other. An example of such a situation is the enhancement and propagation of non-native species such as brown trout and striped bass. Such species, although highly valued from a recreational point of view, compete for food and habitat with native plants and animals which the department also is trying to enhance and recover through various programs and studies.

The Department Lacks a Clear Mission Focus

We recommend that the Legislature (1) determine the primary mission of the department and (2) direct the department to implement its programs and allocate its resources consistent with this primary mission.

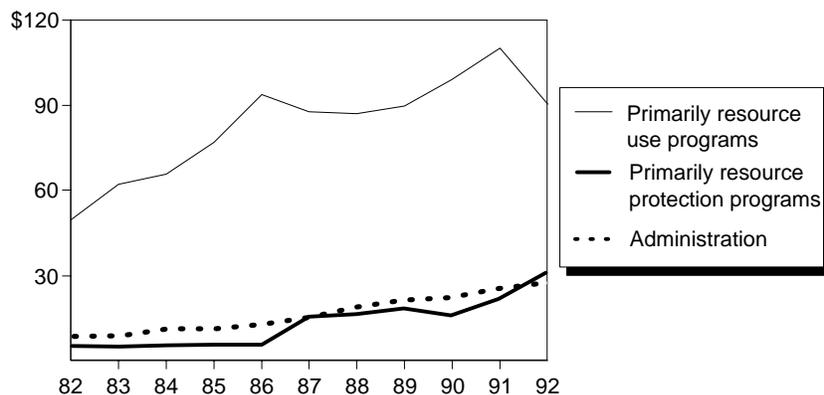
In our discussions with departmental staff and our review of the department's programs and protocols, we found no evidence that the DFG formally makes explicit choices between resource use activities and preservation activities. However, we did find that the department's expenditures over time reflect an orientation towards resource use activities by emphasizing the consumptive aspect of the DFG's overall mission. Figure 8 illustrates this, showing that consumptive (resource use) programs grew steadily during the past decade, whereas environmental programs experienced comparatively less growth.

How Does the DFG Spend Its Money?

Figure 9 (next page) shows the relative level of support expenditures in each different program within the department, including the administrative costs that are distributed among programs. As the figure shows, the DFG spends more funds on inland (and anadromous) fishing programs than any other purpose, followed by wildlife protection or law enforcement activities. Third is the wildlife management program. These programs tend to emphasize consumptive uses of wildlife, although each division devotes some staff time toward habitat-oriented activities that are focused on general habitat needs of all species. For example, our analysis of the time allocations reported by the Wildlife Protection Division staff (that is, wardens) in 1989-90 indicates that only 9 percent of the wardens' time was spent specifically on habitat-focused activities including (1) response to spills and other pollution-type occurrences and (2) environmental review for streambed alteration agreements. In contrast, most of the wardens' time was spent on sport patrol (37 percent) and administration (16 percent). The

Figure 8

Department of Fish and Game Program Growth^a



^a Data are for fiscal years ending in years shown.

remaining time was split among other patrol and law enforcement activities, and training.

Obviously, a clean line cannot always be drawn as to whether an activity is oriented toward resource use or resource protection. Some of the staff time and activities devoted to resource use programs (certain of which do focus on habitat) also further the objectives of

“The distribution of resources among these programs suggests that, in general, the DFG places a higher priority on resource use oriented programs. . .and a lower priority on general resource protection activities.”

the protection-oriented programs. By the same token, the activities of the resource protection programs, which often focus on habitat, also contribute to furthering the objectives of the resource use programs. These inevitable “spill-over effects” make it difficult to cleanly divide the various expenditures between resource use programs and resource protection programs. Nevertheless, the distribution of resources among these programs suggests that, in general, the DFG places a *higher* priority on resource use oriented programs -- that is, those programs related to its historical mission -- and a *lower* priority on general resource protection activities.

Conclusion

As discussed earlier, although the DFG emphasizes resource use in its expenditure mix, it continues to struggle with the dual and sometimes conflicting missions of resource use and resource protection, and experiences internal conflicts over these issues. Without an explicit

ordering of the department’s priorities, and clearly specified objectives that are consistent with these priorities, there is inadequate basis on which to evaluate how well the DFG is implementing its programs to meet the department’s objectives.

“Until the department establishes clear priorities within its dual mission, there will continue to be internal conflicts within the agency.”

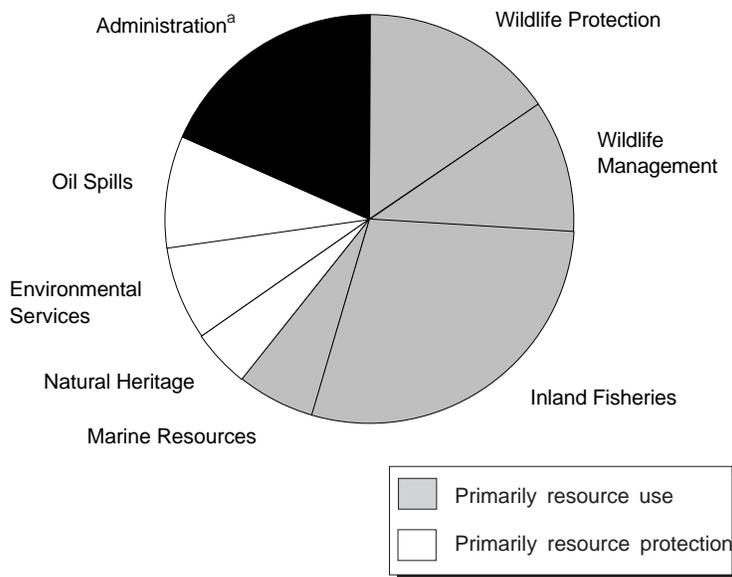
Until the department establishes clear priorities within its dual mission, there will continue to be internal conflicts within the agency. Constraints on overall funding levels and funding flexibility, coupled with the competing expenditure

priorities within the DFG, means that the annual fiscal problems confronting the Legislature regarding this department (discussed below) will continue. Accordingly, we recommend that as a first and most important step, the Legislature specify a basic direction that the DFG should take regarding where to place the emphasis in carrying out its dual mission. Among other things, the Legislature will need to (1) make a determination as to how each mission benefits the population of the state, (2) assess the relative values of these benefits, and (3) direct the DFG to implement a set of programs that reflects the Legislature’s policy.

Figure 9

Department of Fish and Game Expenditures in 1991-92

By Division



^a Includes License and Revenue Branch (12 percent of total administrative costs).

ORGANIZATIONAL PROBLEMS AND ISSUES

Current Organization of the DFG

The DFG currently is organized under a plan whereby the director is head of the department with four assistants: a chief deputy director, a chief deputy for oil spill administration, and two deputy directors. These officials oversee a department that includes five regions and seven divisions, plus the Office of Oil Spill Prevention and Response.

The overall organizational configuration of the DFG, in place since 1953, is known as a “line and staff model.” In its early years prior to 1953, the department had been a centralized line organization in which the equivalent of division chiefs directed and supervised field activities from department headquarters. In 1953, the department decentralized to the “line and staff model” in order to better respond to the varying conditions around the state. The centralized system had hampered quick and appropriate responses to local situations and emergencies.

How Does the Organizational Structure Actually Work?

Under the “line and staff model”, the regional managers supervise personnel in the field, providing direction, and coordinating and administering programs to implement the director’s policies. Although field staff are assigned to various divisions, the regional managers have direct supervisory control over lower level supervisors, who in turn control the activities of individuals in the field. This regional structure is known as the “line” structure in that program directives flow down a line of command.

The “staff” structure aspect relates to the various divisions located at headquarters who advise the director on program and policy development. Division chiefs and division branch supervisors also interact with the field staff

“Over time, the divisions’ headquarters staff have grown, creating new sections and programs, often with no corresponding field staff.”

designated in each division to provide policy guidance and advice. Division supervisors do not, however, directly supervise field staff, as these field staff report to regional managers. Organizationally, division chiefs have the same rank as regional managers. Over the years, as new responsibilities have surfaced, the department has actually evolved to somewhat of a hybrid configuration of the line and staff model. Whereas in the past there was a clearly visible distinction between the roles of the regional manager and the division chief, today, those distinctions appear less clear. Over time, for example, the divisions’ headquarters staff have grown, creating new sections and programs, often with no corresponding field staff.

Traditionally, the regional managers controlled the budgets for each region. In response to legislative direction seeking greater fiscal control and better management, the department has shifted budget control to the division chiefs. This will enable division chiefs to control the allocation of resources in the field among regions and, implicitly, the priorities of those staff. Consequently, this may result in the department giving emphasis to priorities determined on a *statewide* basis, rather than to local needs.

Finally, the department has designed the new office of Oil Spill Prevention and Response along the line model. Field staff will answer directly to new supervisors in the oil spill division, rather than incorporating new staff into the regions under the direction of the regional manager.

Communication Problems Exist Within the DFG

We recommend that the department (1) conduct a thorough internal analysis of its organization, (2) revisit the organizational recommendations made in a 1958 external consultant's report, and (3) implement organizational changes to increase the department's effectiveness.

As we investigated the department's effectiveness and the nature and causes of the problems it currently faces, one of the most common complaints we heard from staff about the DFG is the lack of communication (1) among regions, (2) among divisions, and (3) between Sacramento and the field. These communication problems tend to contribute to and exacerbate departmental coordination problems and undermine the ability of the DFG to respond consistently and effectively to legislative priorities. For example, it can mean that the intent of a policy directive from Sacramento will not always translate into an appropriate action at the field level.

This communication problem does not appear to be an inherent problem with the line and staff model, given that the Department of Parks and Recreation and the California Department of Forestry and Fire Protection both use this model and appear to effectively communicate policies from headquarters down to the field level, and receive communication back from the other direction. It is quite possible that the evolution of the DFG away from a pure line and staff model to a more hybrid form has contributed to this communication problem. On the other hand, this communication breakdown could also stem from the bifurcated mission of the department and the different priorities of various staff.

The Problem is Not New

The DFG's organizational structure has undergone close scrutiny before, largely due to many of the same problems and complaints

“Communication problems tend to contribute to and exacerbate departmental coordination problems and undermine the ability of the DFG to respond consistently and effectively to legislative priorities.”

that prevail today. Most notably, in 1958 the Legislature authorized \$500,000 (1991 dollars) for an extensive review of the DFG which was prepared by the management consulting firm of Booz, Allen and Hamilton. The resulting report, based on the work of five nationally recognized specialists in fish, game and wildlife resources management, contained an extensive review of the department's programs, both from an analytic/scientific perspective, and from an organizational point of view.

At the time of this study, the consultants observed a lack of teamwork and communication among DFG staff. In the consultants' view, the functional separation of the field personnel into wardens, game managers and fisheries managers tended to contribute to and perpetuate this problem of disunity. As a solution, the report recommended that the department maintain the “line-staff” model, but further decentralize field operations down to a district level, beneath the regions. They also recommended that field staff assigned to a district manager should be generalists. The consultants envisioned the creation of a “conservation officer”; that is, an individual that was both a warden and a biologist who would engage in a broad range of activities. Currently, some other states apply such an approach. Both Missouri and Colorado staff field positions with individuals that have both a four-year degree in biological sciences and full peace officer training. This broad training enables staff to respond to a range of diverse and complex problems that arise in the field.

Although the DFG adopted many of the report's recommendations relating to the management of fish and wildlife, it did not adopt the recommendations that related to the organizational structure. Given that many of the problems that currently face the DFG match those identified in 1958, we recommend that the DFG conduct a thorough internal analysis of its organizational structure using this previous study as a guide, and implement changes to its structure aimed at solving communication difficulties and enhancing overall program effectiveness.

FISCAL PROBLEMS AND ISSUES

This department has repeatedly been the subject of legislative concern and attention for years because of the perception that there is a DFG fiscal crisis. Our analysis of the department's revenues and expenditure patterns suggests that the DFG faces both short-run and long-run fiscal challenges. In the short-run context, inattention to developing accurate revenue estimating techniques has resulted in frequent revenue shortfalls attributable to faulty revenue estimates. There are strategies available to address this problem, as discussed below. In the long-run context, however, the department faces fundamental, more difficult-to-solve fiscal troubles similar to many other state agencies. These primarily include a growing gap between program demands and available resources. Compounding this problem, there are funding restrictions which limit the ability to allocate special fund resources effectively. In the next section we outline both the short-run and the long-run fiscal issues and

problems facing the DFG, and suggest possible solutions to each.

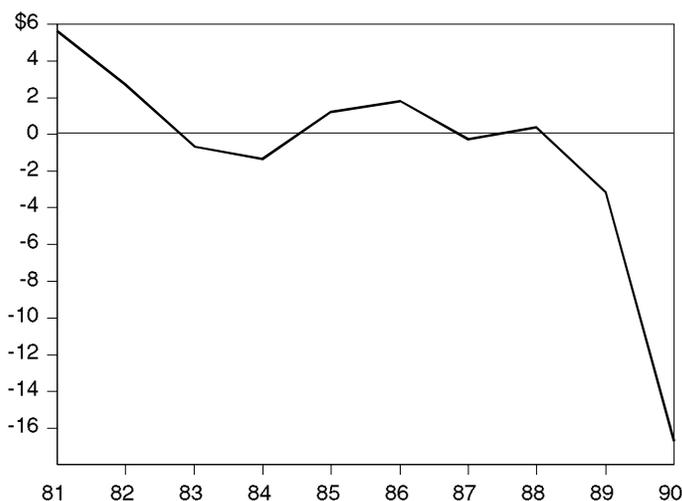
Short Run Fiscal Problems

The problem of estimating license revenues

Over the past decade, the department's performance has been mixed in estimating the revenues that it will receive from state hunting and fishing license sales and which it will deposit in the Fish and Game Preservation Fund (FGPF). Figure 10 shows the difference between actual and estimated FGPF revenues. As the figure shows, the department's estimated revenues were less than what actually materialized more often than not through the mid-1980s. However, even though license estimating was an exercise the department was experienced in undertaking each year as part of its baseline budget development, the ability of the department to predict revenues accurately began to deteriorate in recent years, with increasingly large revenue overestimates becoming the rule.

Figure 10

Fish and Game Preservation Fund Difference Between Actual and Estimated License Revenues^a



^a Data are for fiscal years ending in years shown.

The department appears to have solved a portion of its short-run problem by learning how to more accurately estimate its base revenues, but has replaced this problem with one of estimating revenue from new sources.

Thus, not surprisingly, by fiscal year 1989-90 the DFG ran a substantial deficit. The Legislature rectified this problem by passing legislation that loaned (1) \$3.6 million from the Environmental License Plate Fund (ELPF) and (2) \$3.3 million from the Off Highway Vehicle Account (OHV). (At the time this program review was written, legislation was pending that would forgive the ELPF loan and extend the OHV repayment deadline by two years -- AB 1941, Kelly).

It should be noted that the data shown in Figure 10 mask some of the revenue estimating problems that have occurred. In particular, fiscal year 1985-86 is an example of this. During the 1985-86 budget review process, our office identified a \$7.1 million gap between planned expenditures and anticipated revenues for that budget year. In response to this shortfall, the Legislature (1) provided a \$2 million General Fund Loan, (2) passed legislation that appropriated \$1.2 million from the General Fund to the nondedicated portion of the FGPF, and (3) raised a variety of license and tag fees for hunting and sportfishing including increasing the fishing license from \$13.75 to \$18.00. These actions by the Legislature served to augment the FGPF substantially, thereby exceeding the DFG's revenue expectations for 1985-86.

Steps taken to eliminate revenue overestimates

Recognizing the need to break out of the recent cycle of revenue overestimates, the department revised down its January 1990 budget revenue projection by \$11.2 million in Spring 1990, reflecting a change in estimating methodology. This new methodology reversed the traditional assumption of the department that license sales would rebound the next year following a decline, and instead, projected a downward trend for future years, based on past experience. To date, the monthly estimates appear to correspond closely to actual monthly receipts, suggesting the department has found a better way to predict future revenue flows. In fact, none of the fiscal problems which faced the Legislature regarding this department's 1991-92 budget stemmed from inaccurate estimates for hunting and fishing revenues, as had been the case for the last few years. Rather, these problems stemmed from the department's inaccurate estimates of revenue which would accrue from new fees and programs, as discussed below. In effect, the department appears to have solved its short run FGPF license revenue *base* problem by learning how to more accurately estimate these revenues. However, as the Legislature seeks to find new ways of financing the department's activities, the base estimates problem has been replaced with an equally serious problem of accurately estimating revenues from new sources.

The problem of estimating revenues for new programs and sources

We recommend that the Legislature establish a policy of (1) considering the level of uncertainty in the department's revenue estimates when appropriating funds from new revenue sources and (2) providing initial reserve levels for these revenues that are consistent with the level of uncertainty in the estimate.

During the 1980s to the present, the DFG also overestimated the potential revenues from (1) the new California Wildlands program, Ch 1539/88 (AB 3873, Costa), (2) new environ-

mental review fees imposed by Ch 1706/90 (AB 3158, Costa), and (3) increased commercial fishing fees authorized by Ch 1703/90 (AB 2126, Felando). In all of these cases, the department had to estimate revenues prospectively, working without a past history of revenue performance. In each case, the department substantially overestimated revenues. For example, the DFG projected that the California Wildlands program would generate up to \$5 million annually. In fact it generates less than \$200,000 per year. Likewise, the DFG estimated that AB 3158 fees would generate \$10 million annually, and later had to reduce that amount to \$4.3 million. Finally, the department overestimated AB 2126 revenues by \$2.3 million.

Why are accurate revenue estimates important? Understanding the implications of overestimating revenues requires an understanding of the DFG budgeting process. First, the DFG estimates revenues for the forthcoming year. Based on such estimates, and perceived program needs, the DFG then prepares a budget. If funds are increasing, and the DFG can identify appropriate ways to spend those funds, the DFG will submit budget change proposals that will expand existing programs or create new programs. Program expansions can result in new staff and other support services and/or increased administrative workload, and hence expands the base level of expenditures. Once the DFG develops its program expenditure plan, the Legislature reviews the plan, approving programs that are consistent with legislative priorities.

If the DFG misses the target and *overestimates* revenues, and it budgets those funds that subsequently do not materialize, then the DFG must (1) draw down fund reserves, (2) freeze expenditures and take emergency cost saving measures, and/or (3) file for a deficiency appropriation. Clearly, none of these outcomes is desirable.

Given the budgetary impacts of revenue overestimates, the DFG's poor revenue-estimating track record, and the very difficult task of

estimating revenues from new fees prior to having any revenue history, we recommend that the Legislature consider the level of uncertainty in the initial estimates of new revenue sources when appropriating funds from these sources. We further recommend that the Legislature adhere to a policy of establishing conservative reserve levels commensurate with the degree of uncertainty in the revenue estimates. This policy would (1) eliminate the annual problems of mid-year budget adjustments through the deficiency process and (2) generally reflect a continuation of the approach taken by the fiscal committees with respect to the department's 1991-92 budget.

Long Run Fiscal Issues

Merely estimating and budgeting accurately will not solve the basic underlying fiscal problems the department faces in the long run, largely because the DFG is being confronted with problems of habitat management caused by increasing population pressures virtually in every area of the state. The cumulative effect of human activities such as land conversion for agricultural and urban uses, water diversions, livestock grazing, and resource extraction (such as logging and mining) have led to substantial habitat losses. The most dramatic is the loss of 94 percent of the state's original wetland habitat, primarily from water diversions and drainage for agricultural uses. Habitat losses have translated into an ever-lengthening list of rare, threatened or endangered species. In 1971, the Fish and Game Commission first declared 43 species of animals as threatened and endangered. Twenty years later, the department reports that the list has increased to 72 species of animals and 140 plants. Of these listed species, 70 percent continue to decline, signaling further degradation of California ecosystems. In addition, the department has identified an additional 58 animals and 600 plants that presently meet the criteria for listing, but have not been reviewed and listed formally by the commission.

Funding is not keeping pace with program pressures

These and other statistics suggest that the DFG's financial base is not keeping up with the demands being imposed on it. For example, rather than actually reversing the problem of species loss, the department has largely been involved in documenting the demise of hundreds of plant and animal species. With a few notable exceptions of potential recovery (such as the bald eagle, the peregrine falcon and the California condor), most threatened and endangered plant and animal species live in small, fragmented populations with no guarantee that they will survive.

Another area where staffing and resources have failed to keep pace with workload is the department's implementation of CEQA. The CEQA requires the DFG to review and comment on environmental documents (such as environmental impact reports) which are required of any state or local project that might have a significant potential impact on the environment (including "cumulative impacts" -- the impacts over time of additional projects). The CEQA, when implemented as intended, allows the DFG the opportunity to review a project, identify negative impacts on fish and wildlife, and recommend mitigation measures. Staff levels in the department have not, however, kept pace with the rate of economic and urban development in the state. Some striking statistics for the period 1980 to 1990 which indicate this problem include:

- State population increased by 26 percent.
- Residential and nonresidential construction units increased by 83 percent.
- The number of projects reviewed by the DFG increased by 78 percent.
- The number of staff the DFG allocated to project review increased by only about 8 percent.

In fact, our review of the department's staff indicates that the department has not increased the number of biologists in the field in the inland fisheries division or the wildlife manage-

ment division for over 20 years. Further, not only has the department not changed the *number* of staff, it also has not changed the *distribution* of staff among regions, even though some areas of the state have experienced greater development pressures than other areas of the state. These staff conduct much of the biological review that leads to the department's assessment of the impact of a project, as well as collecting baseline data that leads to the establishment of hunting and fishing regulations. These are but two illustrations of how the

In the long run, the DFG's financial base is not keeping up with the demands being imposed on it due to problems of habitat management caused by increasing population pressures.

increasing human population and the activities of humans have served to increase the workload of department staff. Other examples include increasing poaching problems, increases in general law enforcement violations, and an increase in the number of pollution spills.

Options for the Legislature for addressing long run fiscal problems

The ongoing and expanding environmental problems resulting from California's continued human population growth pose a significant challenge to the department. When coupled with the decline in the department's traditional funding base, these problems become even more severe. In our view, matching a reasonable funding base with the state's habitat preservation and enhancement objectives is the underlying challenge facing the DFG in the decade of the 1990s.

Figure 11

Options for Resolving the DFG's Long Run Fiscal Problems

- ✓ Reduce the DFG's workload to fit existing declining revenue base.
- ✓ Enhance the DFG's financial resource base such as through increasing broad-based funding and/or user fees.
- ✓ Improve the DFG's priority setting, so as to use existing resources most effectively.

The Legislature has three broad options from which to choose in making sure that a long run balance is achieved between the DFG's fiscal resources and the demands placed on them. Specifically, as summarized in Figure 11, these are: (1) reducing the workload placed on the department so as to enable it to live within its existing revenue base, (2) enhancing the existing revenue base, and (3) improving the allocation of available resources through better priority setting. Of course, these approaches are not mutually exclusive.

1. Reduction of existing and/or future workload

As the number of individuals who hunt and/or fish declines, the Legislature could direct the DFG to reduce its support services for these activities in order to help keep spending and resources in balance. Much of the existing activities of certain divisions -- most notably the inland fisheries division -- relate to recreational interests. Such a downscaling of support services for existing activities could include, among

other things:

- *Reducing hunting activities.* This might include cutting back on the amount of time staff spends collecting data for the purpose of setting bag limits and establishing hunting seasons. It also might mean reducing the level of time spent on managing hunts in various parts of the state. Such measures could result in a closure of some hunts due to the inability of the DFG to collect adequate data to justify hunts pursuant to CEQA requirements. If that took place, it could have a negative revenue impact.
- *Reducing recreational fishing activities.* This could include warm water "put and take" activities (planting fish to be caught rather than to reproduce and expand the fish population) including hatcheries, as well as reservoir management activities. The Legislature could consider reducing the scale of these activities. If the Legislature chooses to do this, however, it could also have the effect of reducing fishing license revenues, to the extent that people purchase licenses in order to fish in "put and take" areas. The DFG has asserted on a number of occasions that hatcheries ultimately "sell" licenses. The department has not, however, ever conducted a study to confirm that assertion. Consequently, we are unable to determine what effect pursuing this option would have on revenues, and thus what its net impact on the DFG's fiscal situation would be.
- *Reducing commercial fishing regulatory activities.* This could entail spending fewer

" In our view, matching a reasonable funding base with the state's habitat preservation and enhancement objectives is the underlying challenge facing the DFG in the decade of the 1990s."

hours on inspections and audits, as well as less effort tracking the condition of fisheries. While this would reduce DFG expenditures, it also might result in overfishing of the resource which, in the long run, could reduce incomes to fishermen. This also could eventually result in a decline in revenues to the department.

In all of the above cases, reducing DFG program activity levels, while reducing expenditures, also could potentially exacerbate the fiscal situation the department faces by hurting revenues. What is not clear, however, is to what *extent* such moves would accelerate the revenue declines already taking place. As a result, it is unclear whether such revenue losses would actually exceed the savings incurred from the reduction in workload, and thus what the net impact on the DFG's fiscal situation would be.

In addition to reducing existing workload, the Legislature could consider reducing anticipated *future* workload associated with land acquisitions. Currently, the DFG has accumulated approximately 522,000 acres of habitat for wildlife management areas and ecological reserves. Over the past five years, the Wildlife Conservation Board (WCB) has spent approximately \$145 million and plans to spend an additional \$47 million in 1991-92 on habitat acquisitions. These expenditures translate into extensive acreage; over the past five years, the WCB has purchased over 84,000 acres and plans to add on 24,000 acres in 1991-92. Once purchased, the DFG takes over the operations and maintenance of the property. In many cases, simply leaving the land alone cannot suffice, as the habitat has already been disturbed. Wetland properties often require intensive management to ensure that water is diverted onto the land at the proper time. For 1991-92, the DFG has budgeted \$5.2 million for habitat management, a level which the department believes is insufficient for adequate protection of state lands. If the Legislature restricted these acquisitions, this would reduce the DFG's future ongoing operations and maintenance expenditure needs.

2. Expanding the DFG's financial resource base

As an alternative to program reductions, or in conjunction with them, the Legislature could consider increasing the level of funds available to this department. In this section, we identify and discuss a number of the different funding source options. These include, among others, broad-based General Fund support, the use of general environmental funds, and the use of specific user or so-called "impact" fees.

The option of using a broad-based funding approach

In thinking about how to go about providing for increased DFG funding, *if* that is an avenue the Legislature is interested in pursuing, it is useful to first consider who the direct and indirect beneficiaries of the department's activities are. Generally speaking, we believe the DFG should continue to rely primarily on special funds for its funding, given that so many of its activities directly benefit those who do or can be required to pay user fees. However, it also is important to consider the extent to which the DFG's activities are what economists refer to as "public goods." The term "public good" refers to a good or service that benefits the entire population, whether or not they paid directly for it. For example, national defense is considered a public good, as is a substantial portion of the benefits accruing from K-12 public education. Even if only certain individuals were taxed for national defense, or to support schools, the entire population would benefit from protection of the armed forces, or from having an educated citizenry. Economists typically argue that, for this reason, a strong case can be made to fund such goods using broad-based general tax dollars, as is generally done.

Within the DFG, the protection of fish and wildlife habitat (as opposed to species-specific activities related to recreational or commercial activities) would seem to fall under the category of "public good" because the public benefits from maintaining the natural diversity and ecological health of the state. An unhealthy

“There are some activities related to native fish and wildlife preservation that could appropriately be funded from the General Fund, or from general environmental funds . . . Another approach the Legislature could consider is to increase or extend user or “impact” fees.”

ecosystem inevitably results in an unhealthy environment for humans. As such, there are some activities related to native fish and wildlife preservation that could appropriately be funded from the General Fund, or from general environmental funds such as the ELPF or the PRA. Such activities might include (1) the protection and enhancement of rare, threatened and endangered species, as the benefits of such programs accrue to the general public as well as future generations, or (2) general habitat protection or restoration activities, especially where the orientation of the habitat program is on an ecosystem basis rather than a species-specific basis as has been the common past practice. Of course, any determination by the Legislature to use some form of broad-based funding, such as the General Fund or general environmental funds, to support these activities should be based on the extent to which these activities are consistent with the Legislature’s overall priorities for spending General Fund and environmental fund resources.

The option of user or “impact” fees

Another approach the Legislature could consider is to increase or extend user or “impact” fees, sometimes referred to as “polluter pays” fees, beyond the groups currently paying these fees. Impact fees require individuals or firms

who use or degrade a resource to pay all or a portion of the social costs imposed by their use. Chapter 1706, Statutes of 1990 (AB 3158, Costa) requires developers to pay a resource impact fee to reflect a portion of the costs to the rest of society from destruction or alteration of natural habitat, and deposits these fees in the FGPF. Rather than setting the fee at a level to reimburse the department for the costs it incurred in reviewing a specific project under CEQA, the bill set fees generally to pay for a variety of habitat restoration activities in which the department engages. The fee thus acts as a “proxy” for the cost of using the resource -- in this case, the taking of habitat for development.

The Legislature could consider a number of specific impact and/or user fees to increase the funding base of the DFG. As summarized in Figure 12, illustrative examples of possible fees include:

- ***Mining fees.*** Current mining operations in the state, particularly for gravel and open pit mining, can have a significant impact on the state’s fish and wildlife. Gravel mining from streambeds can degrade spawning

Figure 12

Illustrative Examples of Possible Impact Fees

- Mining fees
- Nonpoint discharge fees
- Water use fees
- Wastewater discharge fees
- Highway-related fees
- Recreational fees and/or taxes
- Population impact fees

areas for fish, and open pit mining can eliminate acres of habitat and interrupt migration patterns for a wide variety of terrestrial species.

Until recently, the state did not know the number and location of all mining operations in the state. However, Ch 1097/90 (AB 3551, Sher) requires that each mining operation provide to the state by July 1, 1991 detailed information on its activities. Mining operations must submit this information to local lead agencies (counties) for review as well as to the state Mining and Geology Board. This will enable the counties and the state to develop a data base of mining operations, as well as ensure that the mining operator has a plan to reclaim the mine once it shuts down.

Using this data base, counties could charge an annual fee based on the volume of minerals removed to reflect the annual ongoing impact of mining operations on the natural habitat. After deducting all administrative costs of levying the fee, the balance could be deposited in the FGPF. The DFG would have to monitor the program, just as it does AB 3158.

- **Nonpoint discharge fees.** Nonpoint discharges -- pollution that does not pour from a single point, but rather originates from a variety of sources difficult to identify -- negatively affect wetlands and other aquatic habitat areas, particularly estuaries and bays. Major sources of nonpoint discharges include (1) agricultural runoff contaminated with pesticides and fertilizers, (2) urban stormwater runoff, and (3) runoff from forestry activities (specifically, erosion from timber harvesting and road building).

Because nonpoint pollution originates from such a large number of sources, levying a fee on each polluter could be administratively difficult. Currently, nonpoint dischargers pay no fee to mitigate the impact of the pollution on habitat. (An exception to this is the fee charged timber harvest operators pursuant to AB 3158 to offset the DFG's

costs of reviewing and mitigating the impact of timber harvest operations.) To institute a charge for the pollution effects, the Legislature could consider a variety of specific fees. These could include:

- **Levying a surcharge on the annual licensing and certification fee currently imposed on individuals that apply pesticides, such as pesticide dealers, pesticide applicators, and crop duster pilots.** The surcharge revenues, collected by the California Department of Food and Agriculture (CDFA), would then be transferred to the DFG.
- **Taxing fertilizers at their point of sale.**
- **Increasing the cost of stormwater discharge permits.** The federal Clean Water Act already requires stormwater discharge permits for most urbanized areas. In California, municipalities will be required to pay a fee for these permits. This fee could be increased by the Legislature to include a charge for the environmental costs of the discharges. The state levy would then be passed on to the DFG.
- **Water use fees.** The use of water from rivers, streams, and the Delta for agricultural, industrial, and municipal purposes has greatly reduced fish populations as well as waterfowl populations. The loss of aquatic, riparian and wetland habitat continues to place strain on these populations and threatens some species with possible extinction.

To mitigate these impacts, the Legislature could, for example, impose a fee on each acre foot of water used. Such a volume-based fee would charge more to those that use more water (and thereby presumably contribute most to the reduction of fish and waterfowl populations). At the current levels of water use in the state, a one cent per acre-foot charge would generate approximately \$220,000 annually. This fee could be collected by the State Water Resources Control Board and then be remitted to the DFG

for use in mitigating the impact of water use on fish and wildlife.

- **Wastewater discharge fees.** The state currently charges permit fees to dischargers of wastewater in order to pay for a portion of the State Water Resources Control Board's water quality regulatory program. These fees could be increased to reflect the impact of wastewater discharges on wildlife species and habitat. The additional revenues could then be transferred to the DFG for use in preserving habitat and mitigating the effects of pollution on native species.
- **Highway-based fees.** Roadkills account for a substantial death toll of many mammals, particularly deer. In addition, multi-lane highways fragment habitats, limiting the movement of various species. Over time, the fragmentation of habitat causes (1) the loss of area-sensitive species, (2) the loss of migratory species, (3) the domination of non-native species, and (4) extensive inbreeding which leads to low levels of fertility, low rates of successful reproduction, low weight of offspring, and high rates of infant mortality.

Chapter 106, Statutes of 1989 (AB 471, Katz) states legislative intent to allocate \$10 million of increased gas tax revenues annually for 10 years, beginning July 1, 1991, to the Environmental Enhancement and Mitigation Demonstration Program Fund. Current law directs the Resources Agency to evaluate grant proposals for using these funds and submit a list of recommendations regarding them to the California Transportation Commission (CTC). The Commission then reviews and makes decisions about funding the list. These funds are to be used for mitigation of the direct and indirect environmental impacts of modifying existing transportation facilities or for the design, construction or expansion of new transportation facilities. To date, the Resources Agency has developed its decisionmaking criteria, and submitted the first list to CTC.

This list included grants to some state agencies including the Department of Parks and Recreation, Caltrans and the DFG. The DFG could continue to apply for these funds in future years.

Second, the Legislature could consider levying a surtax on gasoline and diesel fuel to reflect the ongoing, annual impact of roads on wildlife and habitat. The California Constitution allows the use of gasoline taxes for environmental mitigation related to the impact of road construction and operations. The DFG would have to show how specific mitigation work related to a specific highway or road. At current levels of usage, a one cent per gallon tax would generate approximately \$150 million annually.

- **Recreational fees and/or taxes.** Currently, only hunting and fishing recreational users pay annual fees for a license. The Legislature could consider charging annual use fees or taxes for a number of other recreational activities such as hiking, birdwatching, white water rafting, boating, and skiing. These users, although not consuming the resource in the same sense as do hunters and fishers, can and do have an impact on the habitat. When hikers and campers make use of sensitive areas in large numbers, for example, such as at some of the popular parks, they can seriously disturb habitats and animal species. Likewise, sports such as downhill skiing cause destruction of forests and increase erosion.

Because these user groups represent a large and diverse number of individuals, the process of charging and enforcing individual fees could prove administratively infeasible. Consequently, an alternative way of applying the user fee concept could be a special sales tax on the equipment used for these activities, such as camping and ski equipment.

- **Population impact fees.** At the root of the department's long term challenge to preserve and protect the state's wildlife re-

“Regardless of whether or not the Legislature chooses to alter the workload levels of the department and/or the level and mix of its funding, the Legislature should take action to ensure that the DFG does the best possible job of setting priorities.”

sources is the inherent conflict between the coexistence of a large human population and other species. Consequently, a broad-based fee — coupled with appropriate exemptions for economically disadvantaged groups if desired by the Legislature — could provide the department with a funding base that would grow as population pressure increased. There are a variety of means for implementing such a “population-impact fee” concept, including (1) a flat-rate surcharge on annual state income tax liabilities, (2) a surcharge on auto registrations, or (3) an increase in the sales tax on auto sales which would be used for this purpose. For instance, Florida currently charges a \$4 fee for every new car registered in the state to act as a proxy for the additional resource pressure that will be imposed by that new individual and that automobile.

3. Improve priority setting in using financial resources

The third basic option for addressing the long-term fiscal problems faced by the DFG is to improve the efficiency with which it expends its resources, so that it can get “more bang for the buck” or “the same bang for less bucks.” In fact, regardless of whether or not the Legislature chooses to alter the workload levels of the

department and/or the level and mix of its funding, the Legislature should take action to ensure that the DFG does the best possible job of setting priorities. Our review indicates that improvements are needed in this area. In order to improve its priority-setting and efficiency of resource use, the department requires (1) better planning and (2) more flexibility in the use of funds to enable the department to fund the highest priorities identified in the planning process.

Better Planning

We recommend the Legislature direct the DFG and the Resources Agency to focus the department’s planning efforts, so as to develop a strategic and operational planning process to guide department operations.

Our review of agencies like the DFG in other states found that the Florida Game and Fresh Water Fish Commission (GFWFC) has a planning process in place that works very effectively in establishing priorities and providing direction for the commission. The Florida Legislature was so impressed with this system that they required other agencies in their state to implement a similar system.

How the Florida planning process works

As summarized in Figure 13, the Florida system consists of four components or phases: an inventory of needs and problems, a strategic plan, operational plans, and an evaluation phase.

Inventory. The inventory is designed to answer the question: “Where are we and what problems do we face?” The GFWFC compiles data on fish and wildlife populations and their use to set objectives in the strategic planning phase and to evaluate past operations. This first stage is necessary to assess where problems lie that must be addressed, as well as providing a foundation to measure progress later.

Strategic plan. The strategic plan must answer the question: “Where do we want to go?”

Figure 13

**Florida Game and Fresh Water Fish Commission's
Annual Four-Phase Planning Process to
Establish Program and Budget Priorities**



	Activity	Question	Purpose
Phase I	Inventory	What problems do we face?	Problem assessment
Phase II	Strategic plan	Where do we want to go?	Goal, objective, and strategy definition
Phase III	Operational plans	How will we get there?	Program and activity plans
Phase IV	Evaluation	How did we do?	Efficiency and effectiveness measurement

This overall plan, which includes a mission statement for the commission, formulates the goals, objectives and strategies that identify where the commission wants to be in the next five years. The GFWFC updates the strategic plan each year, and then fully re-evaluates the plan every three years.

Operational plans. The next stage involves the development of operational plans. These plans answer the question: “How will we get there?” Operational plans give life and meaning to the strategic plan and state specifically what the GFWFC will do in a given budget year. Operational plans are annual documents composed of division-level project documents and the legislative budget request for funding the operational plan.

The GFWFC uses this system as an integral part of its annual budget request process. Staff must rank projects based upon the priority of the programs, and the problems that proposed projects would address. Thus, by internally ranking programs based on the severity of the problem that a program addresses, the GFWFC

staff can rank specific projects based on where these projects fall programmatically. The GFWFC’s Executive Director uses this ranking in approving projects for submission to the Legislature for funding.

Evaluation. The GFWFC closes the loop of its planning process with annual evaluations. The evaluation answers the question: “Did we succeed?” Evaluations enable the GFWFC to determine how efficiently and effectively the department met its objectives. The results of the evaluation phase form the basis for revisions to strategic and operational plans.

To facilitate the evaluation process, the GFWFC documents the costs and benefits of each project and program in terms of progress toward strategic plan objectives. Florida captures project costs using a program cost accounting system. The GFWFC also tries to document benefits achieved by its activities, although this is more difficult to document than are costs, due to the subjectivity of measurements. Staff do try to quantify benefits to the extent possible, however.

Currently, the DFG has no planning system on a departmentwide basis to ensure that priorities are properly established and efficiently addressed.

Benefits from Planning. Florida has found that this planning system offers a number of important benefits beyond increased efficiency and better use of scarce resources. The GFWFC has found, relative to the agency's effectiveness prior to implementing a planning process, that they have improved coordination among divisions and offices, and have better communication within the agency. They now can provide clearer direction for their programs. The Commission also finds that it can communicate its mission with the public and with other governmental bodies better and therefore improves its accountability.

DFG efforts to date

Currently, the DFG has no analogous planning system to Florida's on a departmentwide basis to ensure that priorities are properly established and efficiently addressed. Some divisions or branches within divisions of the DFG do require planning, but the planning efforts do not create a coordinated management information system that provides information that can be evaluated for future budget requests.

Recently, the DFG began a planning process that may eventually provide a system similar to Florida's, if the DFG completes the process. To date, a steering committee of various individuals within the department have developed the beginnings of a strategic plan entitled "The Department of Fish and Game -- the 1990's and Beyond." The department steering committee will be receiving feedback about this planning

document from the staff of the department, and use this information to develop a revised consensus document before it proceeds further.

Creating the strategic plan is only the first step facing the DFG. The department must eventually translate this strategic plan into a working system that provides the necessary information, direction and communication channels to coordinate its actual implementation. To this end, we recommend the Legislature direct the DFG and the Resources Agency to continue the department's planning process and to focus the planning efforts on the development of a strategic and operational planning process to guide the department in setting priorities and making operational decisions. Without such a system, the department will not have the accountability or the credibility it needs to effectively proceed into the future.

Achieving Needed Funding Flexibility to Meet State Priorities

We recommend continuation of support for departmental operations primarily from state special funds and the elimination of the constitutional and statutory restrictions which currently dedicate DFG revenues for limited purposes within the department.

As noted earlier and discussed further below, continued support of the DFG primarily from special funds makes sense to us, although a case can be made for funding a portion of the DFG's activities from broad-based revenues. Greater flexibility is needed, however, in the exact way these special fund monies can be used.

An important characteristic of any effective planning process is flexibility to adapt to changing circumstances in order to reflect changing priorities. Since one critical factor necessary for implementation is funding, the need for flexibility extends to the funding area. Plans should identify programs in a particular priority, and then funding levels should dictate how far down the list of programs an agency may go in its implementation activities. Although funding needs generally outpace funding availability, thus restricting the level of implementation,

ideally the amount of funds should not affect the *order* of implementation. Unfortunately, over the years, restrictions on the use of funds available to the DFG has resulted in severely constraining the flexibility of the DFG and its ability to meet legislative priorities. Such a situation can greatly undermine planning efforts, no matter how good their potential.

Florida's GFWFC enjoys far more flexibility in the uses of its funds than does the DFG. The GFWFC has no constitutional restrictions, nor any statutory restrictions on the use of the bulk of its funds. Although the Commission must allocate certain of its funds in specific ways (such as the \$4 car registration fee exclusively for nongame programs, pursuant to the enabling legislation for that fee), the Commission may allocate most of its funds for a variety of programs. This flexibility allows the Commission to first plan priorities and then fund programs in order of priority to the maximum extent that total availability of funds allows.

California's funding restrictions obstruct effective policy implementation

In contrast, in California a labyrinth of funding source restrictions obstruct such a process. Even if the DFG identified program priorities through a planning process, the DFG would have to re-order certain of them according to fund restrictions. A thorough planning process with legislative oversight that translates into action in the field would greatly improve the accountability and effectiveness of the department. Yet, unless the plans were implemented in the order identified through the planning process, that accountability and effectiveness would be diminished--perhaps significantly. Specifically, funding restrictions inevitably alter priorities and cause reversals or modifications of policy direction.

Enhancing ability to fund priorities

Because hunters, fishers, and other recreational outdoor enthusiasts benefit more directly from most of the department's programs than does the general public, a significant por-

“So long as the current narrow constraints remain on the uses of the FGPF, the department and the Legislature will be unable to ensure that programs that provide the greatest benefits to fish, wildlife, and habitat are those that are funded first.”

tion of the department's funding has been through “user charges” that seek to link the amount of support provided with the amount of benefits derived. In our view, this linkage of greater direct benefits with greater share of the cost through special funds — most significantly the FGPF — continues to make sense, and thus should be continued. However, so long as the current narrow constraints remain on the uses of the FGPF, the department and the Legislature will be unable to ensure that programs that provide the greatest benefits to fish, wildlife, and habitat are those that are funded first.

Accordingly, in order to enhance both the planning potential of the department and its ability to ensure that the highest priorities are those that are funded, we recommend that the department continue to be funded primarily from special funds, but that the constitutional and statutory funding restrictions currently placed on the use of the DFG's special funds be eliminated so as to ensure that the department and the Legislature have the greatest flexibility possible in meeting program priorities within the broad parameters of wildlife preservation and enhancement. The recommended steps include (1) repealing the constitutional provisions restricting the use of the the bulk of the FGPF solely to programs of benefit to hunting and fishing, (2) repealing Section 711 of the Fish and Game Code, (3) abolishing dedicated accounts, and (4) continuing the current practice

of depositing license and related revenues in the FGPF. Adoption of this recommendation would not change the special fund status of the FGPF.

Constitutional restrictions. The current constitutional restrictions on the use of hunting and fishing license revenues requires that the department maintain a species-specific focus in planning its activities. Consequently, the department may end up managing a specific property to enhance a specific game population rather than to enhance the overall habitat for the diversity of wildlife that live there. Our review of the wildlife/habitat management programs in other states and our review of the department's programs indicate, however, that there is *no need* for this conflict in mission: managing habitat optimally for the diversity of species that occupy it will result in the optimal balance of general benefits to habitat and direct benefits to consumptive users. Removing the constitutional restriction that hunting and fishing revenues be used only for activities directly related to protecting or propagating hunted and fished species would allow the Legislature greater flexibility in funding the highest wildlife and habitat priorities first. While our analysis indicates that outright repeal of the constitutional limitations on expenditure of hunting and fishing revenues is justified, the Legislature may wish instead to take the approach of broadening the restriction so that *any wildlife, fish, or natural habitat purpose* could be funded from these revenues.

Section 711. Deletion of Section 711 of the Fish and Game Code would enable the Legislature to further free up funds from a variety of fund sources currently available to the department and apply them toward the highest prior-

ity programs within the department, regardless of whether these priorities are use-focused or preservation-focused. Section 711 reflects the current constitutional restriction by limiting the use of hunting and fishing revenues to hunting and fishing programs. In addition, it limits the use of other funds to nongame programs. Deletion of the section would allow the Legislature to establish priorities and then fund them in priority order.

Dedicated accounts. Deletion of all dedicated accounts would further enhance the DFG's flexibility and thus its effectiveness. These accounts generally are set up because a particular interest group desires a specific set of activities accomplished. The DFG then implements these activities, even if they are not consistent with the DFG's highest priorities. Moreover, sometimes the enabling legislation places an artificial cap on the amount of money the department can charge for administrative overhead. This often means that other fund sources must subsidize the costs of managing dedicated fund programs. Thus, dedicated accounts can both distract the department from its highest priorities and drain the department's funds by subsidizing lower priorities.

The objective of repealing the constitutional and statutory restrictions and eliminating the dedicated accounts should be threefold. First, these steps should eliminate the current incentives to fund low-priority programs at the expense of higher-priorities just because funds are available. Second, eliminating funding restrictions should maximize flexibility for the Legislature when setting program priorities for and funding activities of the department. Third, these steps should enable the Legislature and the administration to manage the activities of this particular department more effectively.

CONCLUSION

In the preceding analysis, we have focused on the major problems facing the DFG, both in the short run and in the long run. In our view, as long as the DFG continues to operate with a

dual and often conflicting mission, the Legislature and the department will not be able to solve the department's fundamental long-run problems, including how to effectively allocate

Figure 14

Summary of Action Steps to Resolve Ongoing Problems within the Department of Fish and Game

The Legislature should:	The Department of Fish and Game should:
<ul style="list-style-type: none"> <li data-bbox="228 548 779 716">✓ Determine the primary mission of the department so that conflicts between programs focused on resource use and programs focused on resource protection can be resolved. <li data-bbox="228 730 779 869">✓ Implement programs and allocate resources consistent with the primary mission in order to reflect overall legislative goals and priorities. <li data-bbox="228 890 779 1058">✓ Establish a policy of considering the level of uncertainty when appropriating funds from new revenue sources in order to ensure that adequate reserves exist to fund shortfalls. <li data-bbox="228 1087 779 1255">✓ Direct the DFG and the Resources Agency to focus the department's planning efforts so as to develop a strategic and operational planning process to guide the department's operations. <li data-bbox="228 1283 779 1415">✓ Eliminate statutory restrictions and pursue elimination of constitutional restrictions placed on departmental revenues, in order to fund highest program priorities. 	<ul style="list-style-type: none"> <li data-bbox="862 548 1396 686">✓ Re-evaluate its organizational structure and staff allocations in order to solve ongoing communication problems and to enhance program effectiveness. <li data-bbox="862 730 1396 869">✓ Continue improving accuracy of revenue estimates to avoid proposing expenditure of funds not likely to materialize. <li data-bbox="862 926 1396 1094">✓ Periodically modify allocation of field staff to respond better to pressures placed on California's wildlife resources by increasing population and development. <li data-bbox="862 1150 1396 1289">✓ Continue the current planning process and integrate ongoing planning into annual budget development to improve priority setting and accountability.

funds to different programmatic needs that are expanding at a rate faster than the resources available. Figure 14 summarizes the action steps we believe are needed to address this and the other basic problems confronting the Legislature with respect to the DFG. As the figure

shows, the Legislature should, as a first step towards resolution of the department's problems, establish priorities for the overall mission and objectives of the DFG. In addition, the department must improve its estimates of revenues and, in turn, and budget expenditures

reasonably and conservatively in order to live within its means. Repealing constitutional and statutory restrictions also is necessary in order to allow the DFG to move away from a narrow focus driven by the requirements of specific funding sources and broaden its perspective to meet the fish, wildlife, and habitat challenges of today and the next century. Eliminating these restrictions, coupled with increased planning efforts on the part of the department and the Resources Agency, would enable the Legislature to establish priorities and fund the highest priorities first.

Finally, the Legislature should consider a wide range of policy options to address the long-term workload and funding problems faced by the DFG. As human population pressures on habitat mount, the workload demands placed on the DFG increase and will exceed available resources. The Legislature should consider reducing programs it deems less critical and/or increasing the revenue base of the department through a variety of impact fees and broad-based fund sources such as the General Fund or general environmental funds based on its assessment of program beneficiaries.❖

This Special Study was prepared by Ruth Coleman under the direction of Sarah Reusswig Olsen, (916) 445-5616. Diana Canzoneri and Michael Zelner provided invaluable assistance. Others contributing to the study were Carol Daniel, Kate Hansel, and Paul Navazio. For additional copies, please contact the Legislative Analyst's Office, State of California, 925 L Street, Suite 610, Sacramento, California 95814, (916) 445-2375. Permission is granted to reproduce this study as needed.

Legislative Analyst's Office



Recent Reports

California Maritime Academy: Options for the Legislature (January 1990), Report No. 90-1.

AIDS Education in Correctional Facilities: A Review (January 1990), Report No. 90-2.

A Perspective on Housing in California (January 1990), Report No. 90-3.

K-12 Education Fiscal Facts (February 1990).

Year-Round School Incentive Programs: An Evaluation (April 1990), Report No. 90-5.

State Spending Plan for 1990-91: The 1990 Budget Act and Related Legislation (August 1990), Report No. 90-6.

Child Abuse and Neglect in California: A Review of the Child Welfare Services Program (January 1991), Report No. 91-1.

Annual Report, Legislative Analyst's Office: Fiscal Year 1989-90 (January 1991), Report No. 91-2.

Analysis of the 1991-92 Budget Bill: Summary of Findings & Recommendations (February 1991), Report No. 91-3. This report presents the results of our detailed examination of the Governor's Budget for 1991-92.

The 1991-92 Budget: Perspectives & Issues (February 1991). This report provides perspectives on the state's fiscal condition and the budget proposed by the Governor for 1991-92, and identifies some of the major issues facing the Legislature.

Analysis of the 1991-92 Tax Expenditure Budget: Overview and Detailed Compendium of Individual Tax Expenditure Programs (May 1991), Report No. 91-4.

Recent Policy Briefs and Issue Papers

County Fiscal Distress: A Look at Butte County (December 1989).

Bonds and the 1990 Ballots (January 1990).

A Review of the Governor's Housing Initiative (March 1990).

California's Low-Income Housing Tax Credit (May 1990).

The State's Budget Problem (December 1990).

An Overview of the 1991-92 Governor's Budget (January 1991).

California's AFDC Program: Current Trends, Issues and Options (February 1991).

Reforming California's Mental Health System (March 1991).

Organizing State Government to Meet California's Environmental Protection Priorities (May 1991).

Implementation of Proposition 99: An Overview (May 1991).

Sources and Uses of K-12 Education Funding Growth: 1982-83 through 1991-92 (August 1991).

Reprints from the **1991-92 Perspectives and Issues** (February 1991)

State Fiscal Picture

Strategies for Addressing the State's Budgetary Imbalance

Proposition 98

The County-State Partnership

California's AFDC Program

Community Corrections

State Infrastructure

Uses of State Bond Proceeds

School Restructuring in California

State Rail Program

Copies of these reports can be obtained by contacting the Legislative Analyst's Office, 925 L Street, Suite 610, Sacramento, California 95814, (916) 445-2375.