Seven Strategic Initiatives

The Department of Fish Game (DFG) is the lead agency for conserving California’s fish, wildlife and habitat resources and we are leaders in our field.

In early 2006, DFG leadership took a collective pause to envision DFG five, 10 and 15 years into the future. The Director assembled a team of staff, middle managers, and executive team members to participate in a structured process to solicit, capture, and assemble ideas – ultimately initiatives – that represented a direction for DFG. The team was challenged to look beyond day-to-day activities, however vital, and consider what legacy they would leave for wildlife, the public and DFG employees. They were tasked with determining how to maximize existing resources and capitalize on the new funding sources to best insure this inheritance and to identify where organizationally the responsibility for these efforts would reside.

The team identified seven strategic Initiatives for further exploration. These Initiatives signify the continual evolution of DFG and its direction. The next step was to develop strategies and tasks for both short- and long-term efforts to implement these Strategic Initiatives.

These Initiatives are:

Initiative 1: Enhance communications, education and outreach

Initiative 2: Develop statewide land stewardship based upon resources needs including acquisitions, enhancement and management

Initiative 3: Develop strong water resource management program

Initiative 4: Develop and enhance partnerships

Initiative 5: Improve regulatory and permitting programs

Initiative 6: Enhance organizational vitality by focusing on employees and internal systems
Initiative 7: Expand scientific capacity
Initiative 1: Enhance Communications, Education – Purpose

Strategy 1: Enhance communications by creating a marketing strategy
Strategy 2: Enhance education by developing an environmental ethic among future generations
Strategy 3: Enhance outreach by developing partnerships to assist in delivering DFG's message

In forming the Office of Communications, Education and Outreach (OCEO) in October, 2005, leadership emphasized the need for DFG to more effectively engage our constituents. Communications, education and outreach activities are a valuable means to reach the people we serve. It is evident the state's ongoing population growth, especially in urban areas, continues to put pressure on fish and wildlife resources, thus increasing the challenges of resource management. What isn't always as obvious is the need for us to make targeted connections with Californians to inform and educate them about what DFG does, how we do it and why it should be important to them. It is imperative that we help foster not only the next generations of resource stewards, including future DFG employees, but also the next generations of responsible citizens who actively support our efforts.

Since the Initiatives were launched, a complete organizational restructuring within DFG created the Office of Communications, Education and Outreach (OCEO), which formerly resided within the Law Enforcement Division. Further, OCEO structured its staff in an effort to provide more marketing specialization. Previously, all communications staff was required to handle some of the multitude of incoming media and public calls. The new structure allows for a representative for each region as well as separate marketing specialists to handle major topic areas. This allows for more comprehensive, thought out products, and allows some staff to focus on DFG's overall marketing and messaging rather than the hot button issue of the day.

We continue to refine our methods of internal and external communication. A new marketing specialist was hired to create an Information Center that will serve as DFG's employee newsletter and repository for all department-wide communications. Externally, DFG makes countless contacts in media relations,
community relations, web presence and social media daily, and we are pushing to have even more of a presence.

DFG continues to identify and connect with targeted audiences who are traditionally not reached, but who have a significant impact on the resource without excluding traditional constituencies (i.e. hunters, commercial and recreational anglers, conservation groups). Our marketing specialists have been targeting non traditional groups with like interests for partnerships. An example is a ‘Be Bear Aware’ program we are developing in hopes to partner with sanitation officials in the Tahoe Basin to reduce bear/human conflicts.

We work to instill conservation education in California’s youth through strong community outdoors programs (Fishing in the City, Nature Bowl) as well as classroom education programs (Project Wild, Archery in the Schools Program, Classroom Aquarium Project). Normally we work to grow and refine these programs, but recent budgetary years have just allowed us to keep them afloat.
Initiative 1: Enhance Communications, Education – Future Implementation

In order to move Initiative 1 forward, these steps are the beginning of a statewide push to improve DFG’s image in California’s communities:

1. Increase our social media presence: Currently we have a DFG Facebook page and Twitter account. Related accounts are: Wild Justice Facebook page, Olive the Oiled Sea Otter Facebook page, Sea Otter Tax Check Off page, OSPR spill Twitter account, and we are working on an OSPR Facebook page and QR code that will lead users to the CalSpillWatch page. We are currently exploring the idea of using viral marketing for warden recruitment. We need to actively update our You Tube site and market the videos we put there. These efforts need to continue and expand. Social media is all but overtaking traditional media in how people get information to constituents and DFG cannot be left behind. We are creating a social media outreach plan, but it requires significant staff time. Not only does this require resources to create these pages, but to monitor as well.

2. Improve regional media relations: Regional Public Information Officers will travel to their respective regions to facilitate media trainings to promote consistent and appropriate messaging. Also, redesign DFG region websites for consistency.

3. Improve community relations: With the help of the Natural Resource Volunteer Program, DFG will organize local workshops to help communities better understand DFG programs and provide a forum for exchanging ideas and concerns. The messages will be tailored to the needs of the community, but could involve Keep Me Wild, Conservation Education, Marine Protected Area boundaries, enforcement information, regulations clarification, etc.

4. Increase youth participation: In addition to growing our Project Wild program (classroom curriculum) and making it more tailored to individual
communities, we need to organize youth activities, workshops and events that help foster the importance of natural resource stewardship in people with they are young. These efforts need to include parents and other adults who see their children’s reactions to conservation messages.

5. Reinvigorate partner organizations: as a result of budget reductions and other factors, DFG has not fully cultivated many of the relationships built over the years. Some examples include school districts, Project Wild facilitators, regional partners with conservation education programs, advertising partnerships, and others. DFG will rebuild those relationships and work to leverage the resources we do have to take the place of dollars used in the past. DFG will also work with multicultural organizations to provide information about DFG’s roles and responsibilities (environmental educational), rules and regulations (and provide translated materials), and will staff informational booths or give presentations at organization events.

6. Improve internal communication: several approaches to effectively communicating with our employees have been tried and the time has come for a fresh and comprehensive evaluation of internal communications. Newsletters used in the past have proven ineffective and a survey of employees is being worked on currently, complete with new ideas for information delivery. Additionally, and as a result of the lack of a centralized and effective internal communications mechanism, factions within the department have created their own newsletters (ie – OSPR, Region 1, Invasive Species, etc). These newsletters should continue, but with better coordination from OCEO. As mentioned above, a new marketing specialist was hired to complete this survey and create an Information Center that will serve as DFG’s employee newsletter and repository for all department-wide communications. Development of a database of staff expertise also needs updating and regular dissemination to all staff.

7. Reinvest in Project Wild: Currently, DFG’s Project Wild coordinator position is vacant and needs to be filled. The program is just treading water, when California used to be the most active proponent of this nationwide curriculum. Project WILD is our oldest and greatest conservation education program and its continuation has to be a priority.
8. The rapidly changing communications and media forums and outlets demand a nimble communications unit within DFG that can effectively react to media, facilitate internal and external communications, and develop positive messages and branding. A comprehensive evaluation of the communications functions to meet these needs is warranted.
Initiative 2: Develop Statewide Land Stewardship – Purpose

- Strategy 1: Evaluation of Current Process
- Strategy 2: Developing Acquisition Priorities
- Strategy 3: Identify Funding and Staffing

DFG is responsible for the management of over 1,000,000 acres of fish and wildlife habitat. In total DFG manages 711 properties throughout the state. These properties provide habitat for a rich diversity of fish, wildlife, and plant species and comprise habitats from every major ecosystem in the state. In addition, DFG also administers several private lands conservation programs designed to assist landowners with the management of wetlands, riparian habitats, native grasslands and wildlife-friendly farmlands. The focus of the department’s initiative with respect to land stewardship is on creating an efficient process for assessing and recommending acquisition lands and then adequately managing those lands now and into the future.

Significant change has been made in regard to process evaluation, leading to a new strategy implemented in 2008 for evaluating and recommending projects to move forward to the Wildlife Conservation Board (WCB) for consideration. The Regional Operations Committee (ROC) has assumed the responsibility of the former Lands Committee in recommending land acquisition projects to move forward. To assist the ROC, new forms and procedures were put into place to expedite projects for consideration by the WCB.

DFG developed a product to identify geographic areas of conservation emphasis (Areas of Conservation Emphasis or “ACE”) and document these areas spatially on maps. ACE information is being used by DFG as a tool to assist in planning and prioritizing potential acquisition areas and landscapes for fish, wildlife and native plant communities’ conservation.

Funding sources remain uncertain and staffing DFG areas continues to be insufficient to fully accomplish stewardship goals. Staffing has become the limiting factor to effective management of wildlife areas and ecological reserves. DFG is experiencing retirements of key lands management positions that provided leadership and management experience important for on-the-ground conservation, management and restoration activities on DFG lands.
A DFG Lands Management and Policy Committee (LMPC) was formed and in 2009, they identified top management and policy issues to improve management of DFG lands, and have taken concrete steps to address the highest priority issues. The LMPC and the statewide lands program recently developed a comprehensive package to overhaul public use regulations for all DFG lands to make them clear and understandable to the public and DFG staff, to clarify requirements and procedures for allowing special uses, and to designate recently acquired properties as wildlife areas or ecological reserves. The first phase of the regulations overhaul has been submitted for consideration by DFG to the Fish and Game Commission, and if approved, would take effect in 2012.
Initiative 2: Develop Statewide Land Stewardship – Future Implementation

To effectively move Initiative 2 forward, DFG must:

1. Identify adequate and consistent funding and full time, permanent, trained staffing for lands that DFG manages.

2. Complete the overhaul of public use regulations, including specifying/changing current use practices as necessary to meet conservation objectives while providing for such public use.

3. Revise and update fee structures for compatible uses of department lands such that cost recovery is achieved.

4. Incorporate DFG's other initiatives related to succession planning and enhancing organizational vitality into the Lands Initiative to compensate for retirements and lack of interest in lands positions caused by career ladder limitations.

5. Secure funding to pay local fees and assessments.

6. Develop and implement strategies for effective water conservation, water quality, and drainage management.

7. Develop commercial, public, partnership and agency use policies and associated fee structures for all uses commensurate with program costs that address federal program income requirements and return revenues back to lands.

8. Improve site security theft, pot farms, homeless camps, under-age drinking, drug use, and vandalism all are factors affecting DFG lands.

9. Evaluate, modify, and improve the land management planning process. DFG prepares land management plans for each new acquisition and the
process is in need of reform.
Initiative 3: Develop Strong Water Resource Management Program – Purpose

Strategy 1: Develop Scientific Expertise
Strategy 2: Enable DFG to Compete Effectively with Other Major Water Interests in the Allocation and Protection of California’s Fish and Wildlife Resources

A primary of goal for DFG is to fulfill our public trust responsibility to the State of California by providing sound leadership in the balanced and integrated management of California’s water resources, for the benefit of aquatic and terrestrial species and those habitats upon which they depend.

Recognizing the importance of an integrated program to address water and wildlife needs as part of meeting our public trust mandate, DFG created a Water Branch in 2008 to better define and assist in implementing the full compliment of water functions and programs across the state. Whether it is water associated with our wildlife areas and ecological reserves, ensuring sufficient water in streams to support and stabilize fish populations, or interacting in a regulatory context with other state and federal agencies to promote water for fish and wildlife, water is a central issue in many DFG programs.

Regarding water rights and water quality, DFG staff needs to have broad program development and support roles and interact with program counterparts in DFG regions. To provide more support to technical staff, for the sake of consistency and efficiency, in the regions who are reviewing permits, applications, doing CEQA review and giving input on regulatory and policy items at the Water Boards, DFG’s Water Branch will need to add staff to these programs. Experience has proven that one person staffing a program cannot achieve the program development workload along with the technical and regulatory liaison work.
To see progress toward these goals, DFG must recognize and/or initiate the following:

1. Instream Flow Program: One important goal of the water resources initiative is to develop expertise within the department to provide a scientific basis of in-stream flow recommendations for water acquisition, water rights, and statewide water planning processes. Staff will develop and implement a multi-disciplinary in-stream flow assessment team with statewide and regional components. The workload will increase over the next 10 years and either more staff will need to be added, or regions will need to provide dedicated staff to assist with growing number of studies. Some regions will have more than one study going on at the same time in the next couple of years.

2. Federal Energy Regulatory Commission/Water Boards: DFG must have the resources necessary (modeling, data, scientific information and staffing) to participate in FERC and Water Board proceedings and to ensure that we are positioned as the most expert and credible resource on the subject of protecting fish and wildlife.

3. Central Valley Project Improvement Act (CVPIA) coordination (general): DFG must identify the resources needed to participate as required in the CVPIA process and to ensure that we can produce the required cost-share in order to continue to receive the full benefit of federal dollars for ecosystem improvement on federally operated rivers. DFG is currently working with the Department of Water Resources (DWR) to coordinate joint planning efforts with the Bureau of Reclamation toward project planning of current and future CVPIA projects with a state cost-share component. Additional staff is required. Capacity also is needed to develop accounting and budgetary processes to appropriately capture state cost-share.

4. CVPIA coordination (refuge water supply): DFG’s goal is to contract or
partner with others such as Grasslands Water District, to hire a water broker to ensure DFG is in position to compete for water purchases. Other entities use water brokers. DFG would also like to identify funds to expand delivery capacity (e.g. ditch capacity) so that we can receive additional water when it becomes available.

5. Water acquisition: Policy is needed to develop water acquisition priorities, guidance, process and funding for instream flow, CVPIA objectives, and DFG-owned lands and facilities. The proposed 2012 Water Bond provides funds for the Wildlife Conservation Board to acquire water rights for instream flow and DFG policy in this regard would also assist matching priorities with acquisitions. A water acquisition policy would provide the basis for DFG to coordinate internally, with WCB, and externally with other agencies and interest groups. Without this coordination, there will be fewer acquisition opportunities in general, and fewer cooperative leveraged water acquisitions.

6. Water infrastructure funding for DFG facilities (general): DFG incurs ongoing water infrastructure cost related to operation of DFG-owned lands. Ongoing fees include water right payments to the State Water Resources Control Board for permitted/licensed water rights, Watermaster fees for adjudicated water rights, jurisdictional dam payments to DWR, Regional Water Quality Control Board water quality regulatory program costs, and various other water-related assessment fees. There are no dedicated fund sources for these fees and often payments are made using operation and maintenance dollars at the expense of facility operation, public trust fish and wildlife resources, and public use. Policy and potential legislative solutions will be necessary.

7. Water infrastructure funding for DFG facilities (specific): DFG is developing a Budget Change Proposal (BCP) to develop a strategy for compliance with SBX 8, which requires reporting of pre-1914 and riparian monthly water diversions using flow totaling devices starting January 1, 2012 (Water Code Section 5100 and 5103). The BCP requests $500,000 for a one-year study to conduct an assessment to inventory existing diversion structures, and identify where improvements may be needed to comply with the new code requirements. A subsequent effort would be
needed for any required construction activities.

8. Water Project Operations: Continue DFG data collection, analysis and oversight activity for State Water Project operations to ensure compliance with CESA/ESA permits and understanding of project operation impacts.

9. Water quality program policy: A policy is needed to identify and prioritize DFG participation in water quality activities. This policy would provide guidance on how DFG should be involved in these activities, ensuring the needed expertise to protect fish and wildlife resources. With no policy or direction, DFG will fail to meet our trustee responsibilities in protecting public interest in clean water for fish and wildlife and risk allowing water quality criteria and protocols to be completely driven by EPA and the State Water Boards.

10. Increase Coordination with OSPR: There is a huge opportunity to work conjunctively regarding funding, personnel, training and laboratory services.

11. Continue to develop a more robust and integrated water program.
Initiative 4: Develop/Enhance Partnerships - Purpose

Strategy 1: Establish criteria and guidance for identifying, developing, and sustaining partnerships
Strategy 2: Form mutually beneficial partnerships that compliment and support essential department functions and programs
Strategy 3: Seek out and extending partnership opportunities to non-traditional partners

Recent times have clearly demonstrated that even during periods of significant economic downturn, demands from California’s large population base and the resultant pressures placed on the state’s natural resources continue to expand. These pressures are not expected to decrease anytime in the foreseeable future. With limited staff and fiscal resources, DFG is, and will remain, challenged in its ability to fulfill its priority stewardship and public use opportunity responsibilities. Looking ahead, partnerships must play a critical role in providing stability for program implementation, stretching human and fiscal resources, and injecting fresh and creative ideas for more effectively meeting our mandates.

Partnerships are nothing new to DFG. We have been, and currently are engaged in many such relationships, some small and others large, with a host of partners from DFG volunteers to major federal funding partners, and virtually everything in between. The long-term benefits of many of these efforts point to a critical need to further develop and foster these positive working relationships. Yet, because of the commitment involved, as we move forward, we must honestly evaluate existing partnerships and be creative in considering and developing new ones.
Initiative 4: Develop/Enhance Partnerships – Future Implementation

It is easy to conclude that our greatest opportunity for success in addressing the many issues that we face will depend strongly on our ability to build on existing relationships with a broad cross-section of stakeholders and to forge new, productive partnerships as we move forward. To this end, we are embarking on a process to achieve the following:

1. Identify and articulate the nature of our existing partnerships statewide. DFG relies on partners for a variety of important efforts including land management and stewardship, identifying priorities for strategic investments in fish and wildlife resources, delivering conservation and management programs, and developing sound and durable policies.

2. Re-think the value and potential of partnerships to aid in effectively carrying out our mission. Effective partnerships require a significant investment of time and resources to fully develop. DFG must honestly and objectively evaluate each existing partnership to look for areas of improvement or, in some cases, examine the underlying need for the continued partnership.

3. Engage with existing partners to solicit their ideas on how to make current and future partnerships more efficient and beneficial to all parties.

4. Identify and document program areas and functions where new partnerships would significantly enhance our ability to carry out our mission.

5. Develop a partnership strategy that will accomplish the goals identified above and lead to broader and more functional partnerships.

6. Create liaison positions that bridge between DFG and key partners.
Initiative 5: Improve Regulatory and Permitting Programs - Purpose

Strategy 1: Consider Revision of Fish and Game Code and Title 14 Regulations

Strategy 2: Consistently implement Statutes and Regulations Among All DFG Offices

It is commonly accepted that Fish and Game Code, Title 14 regulations, the rule making process and permitting need to be assessed and strategies for improvement need to be identified. Statutes and regulations are often unnecessarily complex, not user friendly or enforceable. The current processes cause potential delays to permittees and project proponents. Regulatory processes are not commonly understood and are often inefficient. A lack of consistency in permitting exists. Some regulations are not being implemented or enforced. Many permit programs are not properly staffed or funded.

DFG’s goal is to create and maintain simple, clear, effective regulations, permitting programs and processes through an inclusive and transparent process, and to eliminate the potential for underground regulations.
Initiative 5: Improve Regulatory and Permitting Programs – Future Implementation

To meet the goal of improving our statutory and regulatory structure and related permitting programs, DFG must:

1. Assess mandates, expectations, resources and performance of key statutory and regulatory programs.

2. Align statues and regulations with priority mandates.

3. Fund or dump unfunded mandates.

4. Implement statutes and regulations consistently through internal policy.

5. Consider having the California Law Revision Commission review relevant code sections for possible amendment.

6. Streamline permitting process, making it faster and easier by 1) providing web-based online forms and applications, 2) amending statutes and regulations to exempt certain classes/categories of activities (but not the fees) when DFG or others develop a general permit, 3) providing permit and CEQA review templates for staff to use, 4) documenting 1600, CESA, CEQA, and other review procedures and providing standard conditions, 5) restoring DFG staff and programs with a primary role in planning and implementing any of these actions.

7. Continue to prioritize important policies and guidance documents for the Administrative Procedures Act rulemaking process.

8. Evaluate the need for statutory and regulatory changes to better define processes. Specifically, the California Endangered Species Act (CESA) listing petition evaluation and review process needs reform.

9. Create a dedicated regulations unit within DFG.
Initiative 6: Enhance Organizational Vitality by Focusing on Employees and Internal Systems – Purpose

Strategy 1: Improve direction and promote transparent communications, department-wide
Strategy 2: Increase flexibility in utilization of state civil service classifications
Strategy 3: Improve workplace environment
Strategy 4: Prepare future leaders by fostering development of department knowledge, skill and abilities that define leadership for a successful transition
Strategy 5: Support a vital organization that's well connected and one you'd be proud of
Strategy 6: Empower, communicate with and recognize employees
Strategy 7: Improve the business process for vendor payments

This initiative highlights the need for DFG to provide managers and supervisors with the necessary skills, knowledge and abilities to fulfill their public trust responsibilities to protect the natural resources in California. It also addresses the need to develop strategies for workforce planning as the DFG becomes susceptible as retirement occur. It recognizes the critical role DFG scientists play in managing California’s diverse fish, wildlife and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. All of the scientists at DFG perform an invaluable service for the public and are critical to carrying out the mission of the department. Additionally, this initiative focuses on the ongoing effort to reduce California's carbon footprint to meet the Renewable Portfolio Standard (RPS) Californians will need to obtain 33 percent of its energy from renewable resources or “green energy” by the year 2020. It also recognizes the need to modernize and streamline the state’s HR system to recruit, develop and maintain a well-qualified, high-performance workforce. Lastly, it addresses the need to assist programs in obtaining and using resources effectively and efficiently in carrying out their program objectives consistent with the approved budget by providing accurate and timely information and technical expertise.

Another element of this initiative is to examine opportunities for organizational efficiencies by developing and implementing new systems for payroll, budgeting, and other fiscal functions using current technology. Progress in this focal area has been hampered by a requirement for the Department to utilize state-wide systems that are largely outdated and inefficient. Despite this impediment, DFG is evaluating internal systems to look for opportunities for efficiencies and improving reliability of information and data.
A number of improvements have been made to accomplish these goals. DFG has enhanced its supervisory training modules used for new supervisors and managers. Executive staff formed a Leadership Development Advisory Group to identify areas in which the department may be vulnerable as retirements occur and to develop strategies for workforce planning, particularly for capturing institutional knowledge. A Scientific Community Development (SCD) Program was revived to promote professional development among new DFG scientists and is reviewing and updating the program’s needs assessment, identifying key core training for new scientists, and clarifying the SCD programs goals and plans. Last, DFG continues to monitor its carbon foot print and met its commitments reduce fleet and mobile equipment inventory.
Initiative 6: Enhance Organizational Vitality – Future Implementation

To effectively move Initiative 6 forward DFG must:

1. Increase automation of internal processes and records management to provide “real time” data for management decisions.

2. Enhance e-learning as part of cost savings and increase outreach to remote staff by expanding tutorials and training classes.

3. Redesign employee awards program (DFG Employee Excellence) to recognize scientific achievement and to reward employee contributions which reinforce organizational values.

4. Review and compare the organizational structure of other state agencies with a similar structure to DFG, in an effort to redesign and improve compensation levels in order to attract and retain more quality staff. Remedy inconsistencies in the Environmental Scientist and Biologist series.

5. Revise the DFG Succession Plan by development of a set of strategies for capturing institutional knowledge.

6. System improvement for budgets: Development of a department wide, uniform budget tracking system for region offices and field sites that is in harmony with Sacramento budget reports. At the close of year end, budgets staff should meet in Sacramento to review and the FM12 Reports.

7. Support UC and CSU systems in scientific programs in order to facilitate future recruitment.

8. Identify and implement new or improved systems for managing information and fiscal data for additional transparency and to support employee administration.
Initiative 7: Expand Scientific Capacity - Purpose

Strategy 1: Internal coordination
Strategy 2: Scientific oversight
Strategy 3: Scientific staff development and classification
Strategy 4: DFG data management

The Expanded Scientific Capacity Strategic Initiative is intended to more fully recognize existing DFG programs that generate or utilize primary science and apply this science as part of management, conservation, and public trust responsibilities. It is also intended to improve internal peer review and consolidation of science programs and functions, increase investments in science-based decision making, and create incentives for DFG scientists to participate in the peer review and scientific publication process.

This initiative recognizes that improvements in internal communication, access and awareness among the various DFG scientific programs and their staff are necessary. Because of the diversity of scientific units and projects within DFG as well as organizational and geographic/physical separation, we at times lack sufficient awareness of scientific efforts and experts within DFG.

We also recognize the need to establish consistent standards and practices and inclusion of the most current and effective scientific methods as they apply to our programs. This includes providing clear expectations of scientific excellence in our work products and creation of internal structures and processes that support these expectations.

DFG must invest in retaining, developing and recruiting high quality scientists in order to ensure that DFG’s actions and policies are supported by the strongest possible scientific foundation. Currently, the Office of Training and Development within DFG has an Advisory Committee for the Scientific Community Development Program. The goals and workplan of that committee need to be supported and implemented. This includes creating a regular science conference
for DFG scientific and technical staff.
Initiative 7: Expand Scientific Capacity – Future Implementation

In 2007, the department staff with input from others outside the department, considered the need to enhance our internal science capacity. After significant analysis, the following steps were identified to accomplish the goals set out in Initiative 7, DFG must:

1. Complete the database of scientific employees, their focus, studies, and current research and monitoring activities taking place. Better communicate scientific activities to DFG staff, including a scientific newsletter.

2. Create a Resource and Population Assessment Program team to conduct population modeling for either aquatic or terrestrial animal populations, and provide the lead for all such assessments conducted by DFG. This team would maintain strong ties to academic and non-governmental researchers, and with counterparts in the other state and federal agencies. One facet of their work would be training/mentoring other DFG staff who contribute to their assessment work as co-authors and data providers.

3. Utilize existing policy (modeled after the Interagency Ecological Program) on the minimum standards for any scientific work, establish a research branch, establish an independent science panel for high priority department issues and establish a mechanism for facilitating peer review.

4. Maintain and develop new resources to support research within DFG on though collaborating agencies and organizations.

5. Use new classifications to attract and retain high caliber candidates and technical experts. The salaries for these classifications are competitive and will allow DFG to compete for, and retain, well qualified scientists.

6. Formally establish recruiting pathways with the University of California and California State University systems. Work with department heads and professors to engage graduate students to study issues of interest to
DFG. Upon earning advanced degrees, those individuals could access an inner track for employment with DFG.

7. Encourage DFG scientific staff to collaborating outside scientists.

8. Provide a mechanism (time and support) for existing DFG scientists to complete advanced degrees through their Individual Development Plans.

9. Clarify and publish data collection and storage policies and guidelines. Define the data dissemination process. Develop the system capacity to store and make available DFG data. Evaluate DFG capacity for sustaining current data programs, and identified data program needs and develop a plan for upgrading or enhancing capacity to meet data demands.

10. Find ways to partner in recruitment of experts. Highly qualified scientists, especially Ph.D.s do not always plan years in advance to work for DFG, but apply when a position becomes available. The state hiring process precludes these experts from working for DFG. Partnerships or contracting with other organizations on hiring and salary could circumvent the process by accessing these individuals without hiring them on as official DFG staff.