CALIFORNIA natural resources AGENCY

# The Future of Natural Resource Management

A White Paper and Action Plan

December 2010

*On October 6, 2010, Secretary for Natural Resources Lester Snow hosted a policy summit titled "The Future of Natural Resource Management". The purpose of the summit was to facilitate discussion and debate within the natural resource management and environmental community regarding policy, legislation and finance strategies that would lead to better integration of resource management activities. Local, state and federal government agencies, conservation organizations, industry representatives and other interested stakeholders attended the summit. This document is a report on the outcome of the event and presents a series of near-term and long-term policy recommendations for consideration by the Governor-elect's administration.*

*Simply put, these recommendations aim to improve natural resource management in California.*

## Problem Statement

Too often we find ourselves spending time and money managing the symptom of an underlying natural resource problem. Generally manifest as a crisis that necessitates immediate attention, these issues draw us away from strategic, proactive natural resource management that builds resiliency and avoids crisis management. Also, we have fallen into the habit of funding single purpose projects which respond to specific problems, rather than comprehensive resource programs which address multiple issues. State initiatives such as the Integrated Regional Water Management program have effectively raised the bar in how we fund and manage an essential natural resource, like water, for all of its myriad benefits and across jurisdictional boundaries. Regionally sponsored initiatives, like the Carmel River Restoration, build partnerships across state, federal, private and non-profit groups to leverage resources within a watershed on a broader scale, uniting recreation, salmon habitat restoration, flood protection, a dam removal project and other activities under one interconnected program. These and other examples of Integrated Resource Management (IRM) must be identified, supported, and expanded as we move forward in natural resource management in 2011 and beyond.

## Background

Historically, California's management of natural resources has been a dizzying tale with many distinct chapters. Pre-Columbian resource management by early populations took the form of hunting and gathering and other subsistence-based activities, while heavily resource-reliant, small population numbers during that era kept impacts relatively small. European settlement brought both centralized and decentralized resource extraction on a range of scales. Immigrant populations settled around resource-based economies, such as mining, forestry, grazing, farming and fishing. This development and extraction mindset continued with growing intensity and exponential impact into modern times, leaving lasting environmental impacts. This was tempered only by sweeping state and federal environmental regulations put in place in the mid to late twentieth century. These regulations formed the basis for our current system of resource management.

Today, California's resource-based economic sectors continue, as do development projects across the state. There is growing attention to the essential services provided by healthy ecosystems and the need to restore and maintain resilient ecosystems to sustain those benefits. Terms like "ecosystem services" or "nature's benefits" are widely used among environmental organizations and government agencies seeking to raise awareness and funding to invest in protecting those natural resource values. Examples of ecosystem benefits include flood protection, water supply and storage, air quality, food and fiber production and more.

The body of law and policy which aims to protect and regulate natural resources in California has evolved over time and emerged as a tangled web of state, federal, local, non-profit and citizen group efforts and responsibilities. When it comes to regulating activities affecting natural resources, the existing system often involves

uncoordinated participation from multiple entities. This current disconnected approach to resource management leads to confusion and inefficiencies at a time when the need is greater than ever to protect declining species, reverse declining air and water quality, and deal with the challenges of climate change mitigation and adaptation, all within the context of limited funding.

## The Future of Resource Management: Integrated Resource Management

There is growing consensus that California's resources must be managed through stewardship of the natural processes that provide sustainable production of the products, goods and services upon which our human systems depend. This can only happen through collaboration across agencies, businesses and non-profit organizations which emphasize integrated management approaches and must define twenty-first century natural resources policy. Furthermore, a watershed-based approach, emphasizing community based strategies, with capacity and flexibility to address multiple and often diverse resource concerns within a single watershed, is how California can best achieve big resource protection wins in a time of limited dedicated funding.

The approach just described is known as Integrated Resource Management (IRM), and defined as:

> *"A planning and decision making process that coordinates resource use so that the long-term sustainable benefits are optimized and conflicts among users are minimized. IRM brings together all resource groups rather than each working in isolation to balance the economic, environmental, and social requirements of society."*[1]

Watershed Planning and Total Resource Management are additional interchangeable terms which reflect the goals of IRM.

Unfortunately, local, state and federal resource management planning, activities and goals are too often disparate in nature. At the October 2010 summit presentations were given by local organizations and agencies who are working on a variety of IRM activities at the city or regional level, including water supply projects, fisheries restoration, flood management, and more. Most IRM approaches taking place in California are locally-driven, funded by a combination of private, state and federal funding and they are often coordinated with significant effort by a motivated regional non-profit or local agency.

Three categories of recommendations emerged from the October summit: leadership and governance, funding, and education and outreach.

### IRM Case Study

The relatively small Sun Valley Watershed is located in the northeast San Fernando Valley in Los Angeles and is a tributary to the Los Angeles River. The watershed is 4.4 square miles and is highly urbanized with little open space or habitat.

The community has been plagued for years by frequent, extreme flood events. The initial concept to deal with flood concerns was proposed expansion of the local storm drain system. This single purpose approach would have alleviated flooding, but would have also increased costs and exacerbated stormwater pollution issues in the region.

A number of regional and local groups, facilitated by the Los Angeles Department of Water and Power, formed a partnership which includes Los Angeles County, Los Angeles City, the State of California, TreePeople, the LA Unified School District, the Regional Water Quality Control Board and property owners. This group developed a multi-purpose, integrated approach which exemplifies Integrated Resource Management.

A mix of various state and local funding sources now fund a range of activities in the watershed using landscaping and other innovative stormwater retention techniques to reduce flooding and enhance the local community. Collectively, these actions increase water supply, reduce stormwater pollution, improve water quality, improve air quality, enhance property values, and more.

For more information:

www.sunvalleywatershed.org

[1] Nova Scotia, Canada, Department of Natural Resources

## Recommendations

### *Leadership and Governance*

Many recommendations raised during the summit stemmed from the need for agencies to develop and adopt a set of unifying and complementary resource management goals. Part of this collaborative approach must include better alignment and operational integration of existing resource-related grant programs. Some specific recommendations to begin addressing this need are:

- Foster and elevate permit coordination

  The California Natural Resources Agency (CNRA) and the California Environmental Protection Agency (CalEPA) should engage the legislature in discussions regarding options for appropriate permit consolidation opportunities within state government for projects that demonstrate multiple natural resource benefits. Alternatively, or in the near-term, CNRA and CalEPA should work together to determine where permit coordination can be accomplished administratively. An interagency permit "strike team" should be developed and deployed in order to expedite projects which are identified as state priorities. *See IRM Case Study on permit coordination (page 6).*

- Create Deputy Secretary for IRM position

  A Deputy Secretary for IRM (or similar agency-level policy position) should be established within state government. This person would act as the primary liaison between the Secretaries for Natural Resources, CalEPA as well as relevant state departments, boards, commissions and conservancies to promote integration. This position would also interface with the Strategic Growth Council (SGC) and other cross-sector agencies with natural resource management responsibilities. This would establish a single point of contact on these issues and elevate IRM to the agency level within state government.

- Execute Interagency Memorandum of Understanding on IRM

  The CNRA and CalEPA should engage other state agencies in the development of a memorandum of understanding (MOU) with relevant federal resource agencies outlining joint opportunities to implement policies which further an integrated approach to natural resource management and to identify consolidated permitting opportunities for restoration projects where feasible. This partnership should develop and fund a pilot program and, based on lessons learned from one or more pilot projects, adopt necessary principles and "best management practices" for IRM, building on efforts of the California Biodiversity Council's Watershed Workgroup, the California Watershed Council, and the CALFED Watershed Program. These principles and practices could be used in future state and federal grant cycles as criteria for funding eligibility.

**IRM Case Study**

The Ventura County Watershed Protection District (then known as the Ventura County Flood Control District) was formed on September 12, 1944, when the California State Legislature approved the Ventura County Flood Control Act. The District was formed, in part, to provide for the control and conservation of flood and storm waters and for the protection of watercourses, watersheds, public highways, life and property in the district from damage or destruction from these waters.

On January 1, 2003, the name was changed to the Ventura County Watershed Protection District to reflect changes in community values, regulatory requirements, and funding opportunities. The name change also reflected the District's desire to emphasize integrated watershed management and solve flood control problems with environmentally sound approaches. The District's mission is to protect life, property, watercourses, watersheds, and public infrastructure from the dangers and damages associated with flood and stormwaters.

For more information:

http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/Watershed_Protection_District

- Support and expand "Advanced Mitigation" programs at the state and local levels

  The new administration should direct the CNRA to support and build upon the ongoing Regional Advance Mitigation Planning (RAMP) program which is supported by several state agencies, federal agencies and non-profit partners working to develop an innovative way to advance infrastructure projects in a manner that results in more effective conservation of natural resources. This pilot program will allow for agencies to satisfy mitigation requirements early in the project planning and environmental review process, thus avoiding permitting and regulatory delays, while allowing public mitigation dollars to be stretched further by securing valuable conservation lands on a more economically efficient scale. The RAMP program is an innovative approach that moves state agencies away from piecemeal mitigation projects for their capital projects. RAMP and the emerging State Advanced Mitigation Initiative should eventually be expanded to include local agencies to leverage mitigation dollars spent in California. Advanced Mitigation programs can provide flexibility for IRM project proponents and should be considered a tool for implementation.

- Utilize the SGC to promote IRM

  A new subcommittee or similar effort should be established under the multi-agency, cabinet-level SGC, which includes representation from all the agencies on the Council, to focus on the effective implementation of IRM practices to meet statewide environmental goals and SGC objectives. This subcommittee will identify and work with appropriate state agencies to coordinate and leverage ongoing efforts such as RAMP, the Statewide Watershed Program, and to identify appropriate state activities and grant programs to promote the implementation of IRM. This could be accomplished through an interagency MOU to provide staff support to the SGC. Similarly, the state-federal California Biodiversity Council, the California State Association of Counties (CSAC) and the Regional Council of Rural Counties (RCRC) could partner with the SGC to assist in coordinating across agencies and to bring in rural county interests and programs.

- Evaluate and clarify CEQA exemption for small restoration projects

  CEQA challenges can be used to slow habitat restoration projects in the same way some parties use the act to challenge new development. The CNRA, in conjunction with the appropriate departments, should evaluate Public Resource Code Sections 21083 and 21084, and CEQA Guideline Section 15333, Small Habitat Restoration Projects, to determine if revisions to these sections could result in more expeditious approval of restoration projects relying on these sections. Changes will require legislation, rule making, or both.

- Update the Environmental Goals and Policy Report

  The Governor's Office of Planning and Research, in coordination and consultation with the SGC and state resources agencies, should update the Environmental Goals and Policy Report (EGPR) by 2012. The EGPR has not been updated in recent years and could serve as a platform and vehicle for discussion and further development of Integrated Resource Management across state agencies and moreover to clearly set California's priorities for environmental investment and protection.

- Implement Fish and Game Strategic Vision – AB 2376 (Huffman)

  Implementation of AB 2376 provides a unique opportunity to thoughtfully examine the responsibilities and funding structure for the California Department of Fish and Game (DFG) and the Fish and Game Commission. DFG has broad regulatory authority and public trust responsibilities over natural resource projects and far-reaching authority related to the California Endangered Species Act. The implementation of this bill provides a timely

opportunity for a committee of experts to make recommendations that could better position the DFG for 21st century resource stewardship, including an orientation toward IRM activities. The new law outlines that a task force be appointed by administration officials. The development of a strategic vision is expected to be complete by July 2012.

- The new administration should officially recognize the Statewide Watershed Program

  The need for a dedicated State Watershed Program to assist with natural resource planning, management efforts, monitoring and coordination, has long been recognized. The CNRA and Department of Conservation (DOC), working with an advisory committee, have established the Statewide Watershed Program to fulfill this need. The program needs official recognition through legislation or executive order and adequate funding for continued implementation.

- Future Summits

  As a follow up to the October 2010 policy summit, the DOC's Statewide Watershed Program, in partnership with the Office of the Natural Resources Secretary, will host a second summit in late 2011/early 2012 to build on the recommendations contained herein and to encourage ongoing development of IRM strategies and implementation of next steps.

**IRM Case Study: Coordinated Permitting**

The Elkhorn Slough Partners in Restoration (PIR) permit coordination program is a pilot program spearheaded by non-profit organization Sustainable Conservation. In 1998 Sustainable Conservation launched a public-private effort to support local farmers, ranchers, and landowners interested in improving water quality and wildlife habitat on and near their lands. Sustainable Conservation began conversations with the Natural Resources Conservation Service (NRCS), the Resource Conservation District (RCD) of Monterey County, and regulators about how to support private landowners in their voluntary conservation efforts and how to go about simplifying complex regulatory processes. Elkhorn Slough PIR incorporates erosion control and riparian enhancement practices making it easier for the agricultural community to participate in implementing voluntary conservation projects.

Local, state and federal regulatory agencies have partnered in this effort, providing important guidance and input. Agencies signing on to this innovative 'one-stop permit shopping' include the California Department of Fish and Game, the California Coastal Commission, the Central Coast Regional Water Quality Control Board, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. The success of the Elkhorn Slough permit coordination pilot is propelling the development of programs in other areas of California. For more information: http://www.suscon.org/

### *Funding*

There is a need to identify continuous revenue to fund a variety of IRM related programs and projects. While discussions at the summit did not focus on funding sources, there was considerable interest in reform of funding processes at the state and federal levels. Most IRM or watershed-scale projects are currently funded by a combination of state bond dollars, federal monies, local funding, and private foundation funding. Competition for these dollars is great, funding agreements are often constraining and the timing makes it difficult to line up different funding pots in time to execute a project. Most existing sources of funding are authorized for very specific purposes and are structured to support the implementation of single projects. This makes it challenging to carry out long- term integrated natural resource management programs, particularly at the local and regional levels.

At the policy summit examples were given of large, integrated programs which are successful in receiving government funding for specific aspects of their project, but which still lack relatively small amounts of flexible funding to fully execute the planned project. The Carmel River is an example, where a small flexible grant could leverage millions of dollars in project-specific, existing grant funding to implement large-scale change and improvements in the watershed. An $11.1 billion water resources bond will go before California voters in 2012. The bond includes funding for habitat restoration, water storage, Bay-Delta restoration, Integrated Regional Water Management, water recycling and more. There is great potential for the 2012 bond to support Integrated Resource Management programs and projects. *See IRM Case Study on funding challenges and opportunities.*

- Incentivize development of IRM programs

  The legislature should identify incentives, both financial and performance standard based, for organizations to work towards developing and implementing comprehensive, integrated natural resource management programs. Incentives should include the development and adoption of a single common set of standards for what constitutes an integrated natural resource management program, and the establishment of corresponding flexible financing strategies for the long-term implementation of those management programs. The use of longer grant contract periods, multi-agency funding pools and collective funding agreements designed to implement multi-phased projects and actions are examples of these flexible strategies.

- Flexible funding for leveraging large projects

  There is a great need to identify discretionary funding which could be made available to entities which demonstrate commitment to (and capacity to implement) IRM principles, but which lack a final funding component to leverage existing funds.

### IRM Case Study: Funding Challenges and Opportunities

Funding for natural resource projects historically favors single purpose projects. Multi-objective projects, such as those that follow the IRM approach, often have difficulty fitting neatly into funding categories. The Carmel River restoration project is an example of a large, integrated, multi-purpose project which continues to experience challenges in obtaining sufficient funding for various project phases and elements. Specific challenges include the design, permitting and construction associated with removal of a major dam, as well as relocation of a state highway section which currently inhibits critical floodplain restoration efforts. Timing and coordination of funding is another major obstacle for small and large restoration projects alike. There is often pressure from funding agencies on grantees to show performance through expedient expenditure of funding, which can be a challenge for multi-objective, integrated resource projects.

For more information: http://www.mpwmd.dst.ca.us/Mbay_IRWM/IRWM_library/LCR/LCRproject.pdf

## *Education and Outreach*

Summit participants expressed dismay with the lack of popular understanding of the significance and complexity of natural resource issues. Building understanding and support among youth and adults for the benefits of stewardship and sustainability which can be realized through IRM was suggested through the following methods of outreach and education:

- Expand and enhance watershed education

  Programs which provide K-12 and adult educational materials or educational opportunities should be supported and expanded in order to educate Californians about their "watershed address" (which watershed they are part of and a working knowledge of its assets and threats) and on the general importance of watershed protection and their personal and community role in those efforts.

- Emphasize economic benefits of IRM

  Organizations involved in IRM projects should promote and emphasize the recreational, public health and wellness and economic benefits, such as job creation and tourism, in order to increase community connection and gain broad-based support.

- Promote cost savings & cost avoidance benefits of IRM

  Promoting the costs avoided by an IRM approach (money saved over the life of a project when compared with costs resulting from inaction or business-as-usual actions) could assist proponents in better illustrating the economic benefits of this approach and may lead to increased public support and funding.

## Conclusion

The people of California face a reality in which the availability and productivity of the state's natural resources are limited, precious and face growing threats. For the most part, the system of statutes and policies governing how these resources are managed and allocated were developed during an era when these natural resources were still considered abundant and resilient. Climate change, growth, and increased competition for these resources require a new era of strategic thinking, leadership, and unifying policies and actions designed to preserve and restore our natural resources for long-term sustainability and for the benefits of all citizens. Integrated Resource Management is the framework under which this new system of natural resource stewardship must move forward.

In order to ensure an IRM approach the following actions must be taken by the State of California:

- Key, high-level personnel must be charged with coordinating and integrating resource projects and identifying regional IRM efforts which do the same
- Flexible funding must be made available to fund project aspects which do not fit available dedicated funding streams, and which leverage diverse funding sources
- An interagency coordinated permit "strike team" should be developed and deployed to quickly evaluate and permit significant IRM projects which are considered state priorities

The discussion at the October 2010 policy summit demonstrated the need for action to be taken on this topic, as well as a collective desire to do so. There is acknowledgement that resources are limited and finite while the demands placed upon them are great and growing, and that the resource management legal and socio-political institutions are in need of evaluation and refinement. It is our hope that this document serves to reinvigorate debate in the resource management community about what can and must be done, now and in the future to modernize and sustain the practice of resource stewardship.