# **Off-Highway Motor Vehicle Recreation Commission**

# **PROGRAM REPORT**









# 2011





California State Parks – Off-Highway Motor Vehicle Recreation Division



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# Off-Highway Motor Vehicle Recreation Commission Program Report

January 2011

### **Off-Highway Motor Vehicle Recreation Commission**

Gary Willard, Chair

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Stan Van Velsor

# **Message from the Chair**

As Chairman of the California State Parks, Off-Highway Motor Vehicle Recreation (OHMVR) Commission, it is with great pleasure that I present the OHMVR Program Report (Report) covering the period from 2004-2010. We are proud of our accomplishments during this reporting period and look forward to a very productive future as we continue to serve the people of California.

This Report reflects the concerted efforts of the OHMVR Division, along with partners at the city, county, and federal land manager level to provide sustainable OHV recreation throughout the state. The sustainability of off-highway vehicle (OHV) recreation has also been made possible and greatly enhanced by the contributions from thousands of volunteers and stakeholders who are the backbone of OHV recreation. The Commission continues to support Division staff and all our partners in the continuous effort of promoting a positive and responsible OHV Program that has proven successful over the last 39 years.

OHV recreation is an extremely popular activity in California for people of all ages, genders, and backgrounds. Visitors to OHV recreation areas across the state are family-oriented, environmentally aware, and passionate about sustaining this opportunity for future generations. OHV recreation provides many benefits to the state and its residents in the form of active physical recreation, access to natural habitats, economic vitality through jobs, small business opportunities, adventure tourism, and the corporate headquarters of four of the largest suppliers of OHV vehicles. It is for these benefits that it is vitally important that OHV Trust Funds be preserved and utilized to meet the intent of the founding legislation, which is to provide high-quality OHV recreation while ensuring protection of valuable natural and cultural resources.

As significant loss of OHV recreation opportunities continues to occur through federal legislation, urban encroachment, environmental constraints, and military expansion, and as alternative energy projects encroach onto lands historically available for OHV recreation, we must look to new and creative opportunities to offset these impacts. Likewise, the Commission shares state and national concerns regarding greenhouse gas emissions and recognizes the significant impacts of climate change. The OHV industry is already responding and adapting with clean, quiet, alternative fuel vehicles making technological advances which may soon provide opportunities for future urban OHV park development.

California is the epicenter of the OHV industry and OHV recreation. With the largest OHV program in the country, we are leaders in providing managed OHV recreational opportunities while protecting environmental resources. I hope you enjoy reading this Report and find it helpful in learning about the OHMVR Program. I also encourage you to visit one of our OHV parks and see for yourself why so many Californians engage in OHV recreation and why the recreation continues to grow in popularity each year.

Very truly yours,

Fullard

Gary Willard, Chair OHMVR Commission

# **Message from the Deputy Director**

Californians are privileged to live amidst some of the most spectacular and scenic landscapes in the world, many of which can only be experienced by leaving our paved highways. Millions of people throughout the state are off-highway vehicle (OHV) enthusiasts. These people represent a cross-section of our society and care deeply about the land and their outdoor experience. Through the "gateway" of OHV recreation, they venture off the beaten path, take the road less traveled, experience nature, and spend quality time with family and friends. The Off-Highway Motor Vehicle Recreation (OHMVR) Program exists to provide sustainable and responsible access for these kinds of motorized recreation.

When I assumed leadership of the OHMVR Division six years ago, my primary goal was to facilitate the development of a program that was more accountable and responsive to the needs of the public we serve. At that time, the Program was being reviewed by the Bureau of State Audits, which found significant deficiencies in both programs and processes. In response, we overhauled our programs and procedures, and have successfully addressed all the issues raised by the audit.

Of special note is the development and adoption of the Division's Strategic Plan that reflects the shared vision of the Commission and Division. A key element of this vision is our focus on developing improved OHV opportunities for youth. Certainly, if we want future generations to care for our natural and cultural resources they have to first develop a personal relationship with the land. The off-highway experience is one pathway to building that relationship and is an effective antidote to our modern fixation on electronic devices which draw children further away from critically important outdoor experiences.

The OHV community has a long tradition of caring for the areas in which they recreate. People's appreciation for the environment is not tied to the way in which they recreate; they love the outdoors, whether from the back of a motorcycle or on a backpacking trip in remote wilderness. This report, and the progress it documents, owes a great deal to the many individuals and organizations involved in motorized recreation.

Balancing OHV recreation and resource protection is an ongoing challenge. We must constantly reaffirm our collective commitment to address this challenge and move beyond stereotypes and recognize the value everyone brings to the process. In the years ahead many things will change. What will not change is the Division's unwavering commitment to sharing the experience of nature and the outdoors through the provision of sustainable, high-quality OHV recreation opportunities.

Best regards,

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Daphne C. Greene, Deputy Director OHMVR Division

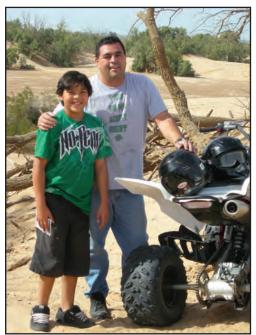
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California State Parks, Off-Highway Motor Vehicle Recreation Commission

# **EXECUTIVE SUMMARY**

### **Program Overview**

By establishing the Off-Highway Motor Vehicle Recreation (OHMVR) Program in 1971, the Legislature addressed both the growing popularity of off-highway motor vehicle (OHV) recreation and the need for environmentally sustainable OHV recreational opportunities. This visionary approach created a user funded Program that provides effectively managed areas and adequate facilities, and balances OHV recreational demands with protection of natural and cultural resources. Coupled with ongoing maintenance and oversight, the Program endures to provide for OHV use consistent with effective environmental stewardship.

The Program, as established and managed, also provides other significant benefits. OHV recreation serves as a gateway for many young people to experience the outdoors and learn to value our state's extraordinary natural resources while recreating on OHVs. The California Biodiversity Council noted during a 2007 two-day meeting dedicated to learning about OHV recreation that areas set aside for OHV recreation activities resulted in preservation of open space which otherwise would have been subject to development. Also, OHV recreation allows many disabled Californians to experience natural areas they would not be able to access without the aid of motorized off-highway vehicles.

There have been significant changes to the OHMVR Program since 2004. A comprehensive review of the Program performed by the Bureau of State Audits (BSA) in 2005 noted significant areas where improvements were needed. Over the past six years, all of the issues highlighted by the BSA report have been resolved. In a significant move to improve the OHMVR Program, Senator Darrell Steinberg and co-author Assembly Member Wolk introduced legislation in 2007 which was enacted in 2008, Senate Bill 742 (SB 742), that resulted in changes in the makeup and responsibilities of the Commission, increased funding to the OHV Trust Fund, and many other changes including the longest Program extension in the history of the Program. The increased level of funding, and resulting Program stability, has enhanced the ability of the OHMVR Division (Division) to meet its goals. This triannual Program Report (Report) highlights the many changes and improvements in the Program, and also discusses areas where improvements are needed.

A Deputy Director is responsible for directing and managing the Division and the OHMVR Program. A nine-member Commission, appointed by the Governor, the Senate Committee on Rules, and the Speaker of the Assembly, provides advice to the Division, reviews and comments on Program implementation, encourages public input, and considers and approves general plans for State Vehicular Recreation Areas (SVRAs).

The OHMVR Program addresses both OHV recreation and off-highway motorized access to other forms of recreation by managing and operating eight SVRAs dedicated to motor vehicle recreation and resource conservation, and through financial assistance via a Grants and Cooperative Agreements Program (Grants Program) to state, local, and federal agencies, Native American Tribes, and nonprofit organizations and educational institutions that provide OHV opportunities and related maintenance, operation, law enforcement, and environmental conservation services. The Division also works cooperatively with the various agencies and organizations to understand their programs and administrative requirements, and to help find management solutions to OHV uses compatible with their specific programs.

### **Program Funding**

The OHMVR Program is funded exclusively from fees generated by OHV recreation and receives no funding from the state's general fund. This section of the report reviews the sources of funding (fuel taxes, registration of off-highway vehicles, and park entrance fees), and how these funds are allocated to support various Program activities (grants, operations, capital outlay, etc.). In 2007, OHV enthusiasts supported a doubling of OHV registration fees to provide increased support for the Program. Currently, annual revenues and expenditures are roughly \$90 million. Also covered is the history of monies borrowed from the OHV Trust Fund. Since the inception of the Program, approximately \$190 million in Program funding has been borrowed (most of which was transferred as loans to the state's general fund), while only a small portion has been repaid.

### Program Report Requirement 1: Strategic Planning

The Report reviews the results of a planning effort conducted over two years, completed in 2009, which resulted in a shared vision between the Commission and Division, and a Strategic Plan which lays out a comprehensive approach for the Program to meet its legislative mandates of providing OHV recreation while ensuring environmental sustainability. The Strategic Plan includes emphasis on such areas as working with stakeholders, transparency in decision making, environmental sustainability, and embracing new technologies to reduce the Program's carbon footprint. Specific objectives, including timeframes and performance measures, were included for implementation of the Plan and to monitor achievement of goals.

### **Program Report Requirement 2:** *Condition of Natural and Cultural Resources*

Protection of natural and cultural resources is essential to the ongoing viability and sustainability of the OHMVR Program. This section of the Report includes details on the condition of natural and cultural resources in areas supported by OHV Trust Funds, particularly in the SVRAs and lands managed by the Bureau of Land Management (BLM) and the United States Forest Service (USFS). The report also highlights specific initiatives at individual SVRAs undertaken to protect water quality, sound, and other resources potentially affected by OHV recreation.

### **Program Report Requirement 3:**

### Accomplishments of Restoration Funding through the OHMVR Division Grants Program

From fiscal year (FY) 2004/05 through FY 2009/10, the Grants Program awarded approximately \$35 million for ecological restoration activities throughout California. The Report describes many of the accomplishments achieved with this funding, including photographs of successful restoration projects.

### **Program Report Requirement 4:**

### Summary of Resource Monitoring Data Compiled and a Summary of Restoration Work Completed

The key to sustainable management is access to, and use of, monitoring data for informed decision making in all aspects of Program operations. The Report summarizes monitoring activities on areas supported with OHV Trust Funds. This section also discusses the limitations of current monitoring efforts, and how these limitations are being addressed, and plans for an improved monitoring system that are currently being developed.

### **Program Report Requirement 5:** *Prevention and Reduction of Trespass*

A goal of managed OHV recreation is to direct vehicle use into areas where such use is legal and environmentally sustainable. This section of the Report considers the causes of trespass (such as poor signage and information, or lack of respect for private property) and then contrasts those with factors leading to legal, managed use (such as access to high quality facilities and a strong education program). Using this assessment as a framework, methods employed by the Division to discourage and decrease trespass are then described. SB 742 established a stable source of grant funding for local and federal law enforcement efforts by dedicating 20% of appropriated grant funds to law enforcement and removing the annual competitive requirement, substituting needs based allocation of law enforcement funds.

### Program Report Requirement 6: Other Relevant Program-Related Environmental Issues

The OHMVR Program is actively involved in addressing and tracking environmental issues such as: greenhouse gas emissions, air quality, asbestos, renewable energy development, the Over Snow Vehicle (OSV) Program, urban encroachment, and USFS Travel Management. The ways in which these issues are being addressed by the OHMVR Program are discussed in this final section of the Report.

### **Conclusions and Next Steps**

The OHMVR Program has made significant strides in recent years in improving management of areas set aside for OHV recreation and advancing the protection of natural and cultural resources. Despite this challenging task, successes have been achieved, and thanks must be extended to the dedicated staff and efforts of individuals and organizations who have an interest in the Program and OHV recreation. Focusing on Program areas that need improvement, along with ongoing efforts to ensure clean air and water, prevent accelerated erosion, and maintain healthy ecosystems, is essential to successfully meeting the legislative intent of the Program—to provide high quality OHV recreation and protect natural and cultural resources.

### **INTRODUCTION**

California's OHMVR Program has as its primary goal and legislative intent the dual central themes that (1) OHV recreation be managed to provide high quality opportunities for OHV recreation, and (2) be balanced with protecting the state's natural and cultural resources. These shared commitments are accomplished through the provision of recreational opportunities directly at SVRAs owned and operated by California State Parks through the OHMVR Division and by financial and technical assistance to other public and nonprofit entities that provide and manage off-highway motor vehicle recreation opportunities as well as enforce the laws associated with motorized recreation.

As required by Public Resources Code (PRC) Section 5090.24(h), Duties and Responsibilities of the Commission, this Program Report is submitted by the OHMVR Commission (Commission) to inform the Governor and Legislature of progress and developments in the state's OHMVR Program:

Prepare and submit a program report to the Governor, the Assembly Water, Parks, and Wildlife Committee, the Senate Committee on Natural Resources and Water, and the Committee on Appropriations of each house on or before January 1, 2011, and every three years thereafter. The report shall be adopted by the commission after discussing the contents during two or more public meetings. The report shall address the status of the program and off-highway motor vehicle recreation, including all of the following:

- 1. The results of the strategic planning process completed pursuant to subdivision (1) of Section 5090.32.
- 2. The condition of natural and cultural resources of areas and trails receiving state off-highway motor vehicle funds and the resolution of conflicts of use in those areas and trails.
- 3. The status and accomplishments of funds appropriated for restoration pursuant to paragraph (2) of subdivision (b) of Section 5090.50.
- 4. A summary of resource monitoring data compiled and restoration work completed.
- 5. Actions taken by the division and department since the last program report to discourage and decrease trespass of off-highway motor vehicles on private property.
- 6. Other relevant program-related environmental issues that have arisen since the last program report.

The 2011 Program Report was presented at three Commission meetings for review and discussion. The Commission received substantial input from staff, stakeholders, and interested parties. Their input and contribution is reflected throughout the Report. Following public review and discussion, the Commission approved the OHMVR Program Report and respectfully submits this comprehensive document to inform the Governor and Legislature of the progress and developments of the state's OHMVR Program.

# **OHMVR PROGRAM OVERVIEW**

In 1971, through enactment of the Chappie-Z'berg Off-Highway Motor Vehicle Law (the Law), the Legislature addressed the growing use of motorized vehicles off-highway by adopting requirements for the registration and operation of these vehicles. In addition, the Law provided funding for administration of the Program along with providing facilities for off-highway motor vehicle recreation. (California Vehicle Code (CVC) § 38000, et seq.)



The Law was founded on the principle that "effectively managed areas and adequate facilities for the use of OHVs and conservation and enforcement are essential for ecologically balanced recreation." The Law required maintenance and oversight to allow for sustainable OHV use consistent with good environmental stewardship.

In 1982, these principles were expanded upon through enactment of the Off-Highway Motor Vehicle Recreation Act, which has been amended numerous times and is now referred to as the Off-Highway Motor Vehicle Recreation Act of 2003 (OHMVR Act). (PRC § 5090.01, et seq.)



The OHMVR Act intends that existing OHV areas be expanded, added to, and managed to sustain areas for long-term motor vehicle recreation and that the OHMVR Program support motorized off-highway access to non-motorized recreation opportunities. The OHMVR Act requires the OHMVR Program be given equal priority with other programs administered in the State Park System.

Through the OHMVR Act, the Legislature created a separate division within California State Parks, the OHMVR Division, which



was given the exclusive authority for administering the OHMVR Program. The Division is charged with all aspects of managing the OHMVR Program.

Most recently, SB 742 was introduced by Senator Steinberg and co-authored by Assembly Member Wolk in 2007, and enacted in 2008. This legislation made a number of significant changes to clarify and strengthen the OHMVR Program related to funding, responsibilities of the Commission and Division, and the allocation of grant funds. It also extended the OHMVR Program sunset to January 1, 2018, the Ion-

gest sunset in the history of the OHMVR Program. The bill received strong bipartisan support from the Assembly and the Senate as it passed through the Legislature by a vote of 114-5.

The goals of the OHMVR Program are consistent with the Legislature's intent as recorded in PRC Section 5090.02 (c) which states it is the intent of the Legislature that:

- Existing off-highway motor vehicle recreational areas, facilities, and opportunities should be expanded and managed in a manner consistent with this chapter, in particular to maintain sustained long-term use.
- 2. New off-highway motor vehicle recreational areas, facilities, and opportunities should be provided and managed pursuant to this chapter in a manner that will sustain long-term use.
- The department should support both motorized recreation and motorized off-highway access to nonmotorized recreation.
- 4. When areas or trails or portions thereof cannot be maintained to appropriate established standards for sustained

long-term use, they should be closed to use and repaired, to prevent accelerated erosion. Those areas should remain closed until they can be managed within the soil conservation standard or should be closed and restored.

- 5. Prompt and effective implementation of the Off-Highway Motor Vehicle Recreation Program by the department and the Division of Off-Highway Motor Vehicle Recreation should have equal priority among other programs in the department.
- 6. Off-highway motor vehicle recreation should be managed in accordance with this chapter through financial assistance to local governments and joint undertakings with agencies of the United States and with federally recognized Native American tribes.

### **The OHMVR Commission**

The OHMVR Act also established the Commission (PRC § 5090.15, et seq.) to provide a public body of appointed members having expertise in various areas related to off-highway recre-

ation and environmental protection. The Commission is dedicated to reviewing and commenting on Program implementation, encouraging public input on issues and concerns affecting the OHMVR Program, considering and approving general plans for SVRAs, and providing advice to the Division on the OHMVR Program.

The Commission is a nine member body consisting of five members appointed by the Governor, two by the Senate Committee on Rules, and two appointed by the Speaker of the Assembly.



L to R: OHMVR Commissioners Brad Franklin, Mark McMillin, Gary Willard, Paul Slavik, Kane Silverberg, Eric Lueder, Stan Van Velsor

Per PRC Section 5090.24 the Commission has the following duties and responsibilities:

- Be fully informed regarding all governmental activities affecting the OHMVR Program.
- Meet at least four times per year at various locations throughout the state to receive comments on the implementation of the OHMVR Program. Establish an annual calendar of proposed meetings at the beginning of each calendar year. The meetings shall include a public meeting, before the beginning of each Grants Program cycle, to collect public input concerning the OHMVR Program, recommendations for program improvements, and specific project needs for the system.
- Hold a public hearing to receive public comment regarding any proposed substantial acquisition or development project at a location in close geographic proximity to the project, unless a hearing consistent with federal law or regulation has already been held regarding the project.
- Consider, upon the request of any owner or tenant, whose property is in the vicinity of any land in the system, any alleged adverse impacts occurring on that person's property from the operation of OHVs and recommend to the Division suitable measures for the prevention of any adverse impact determined by the Commission to be occurring, and suitable measures for the restoration of adversely impacted property.
- Review and comment annually to the director on the proposed budget of expenditures from the fund.

- Review all plans for new and expanded local and regional vehicle recreation areas that have applied for grant funds.
- Review and comment on the Strategic Plan developed by the Division pursuant to Section 5090.32.
- Prepare and submit a program report to the Governor, the Assembly Water, Parks, and Wildlife Committee, the Senate Committee on Natural Resources and Water, and the Committee on Appropriations of each house on or before January 1, 2011, and every three years thereafter. The report shall be adopted by the Commission after discussing the contents during two or more public meetings.
- Additionally, the Commission approves general plans and amendments to general plans for the SVRAs pursuant to PRC Section 5002.2.

### **The OHMVR Division**

The Division operates eight SVRAs located throughout California and supports local, state, and federal OHV recreation areas through financial and technical assistance and professional guidance.

Per PRC Section 5090.32 the Division has the following duties and responsibilities:

- Planning, acquisition, development, conservation, and restoration of lands in SVRAs.
- Direct management, maintenance, administration, and operation of lands in the SVRAs.
- Provide for law enforcement and appropriate public safety activities.
- Implement all aspects of the Program.
- Ensure Program compliance with the California Environmental Quality Act (CEQA) (Division 13 commencing with § 2100) in SVRAs.
- Provide staff assistance to the Commission.
- Prepare and implement plans for lands in, or proposed to be included in, SVRAs, including new SVRAs. However, a plan shall not be prepared in any instance specified in subdivision (2) of Section 5002.2.
- Conduct, or cause to be conducted, surveys, and prepare, or cause to be prepared, studies that are necessary or desirable for implementing the Program.
- Recruit and utilize volunteers to further the objectives of the Program.
- Prepare and coordinate safety and education programs.

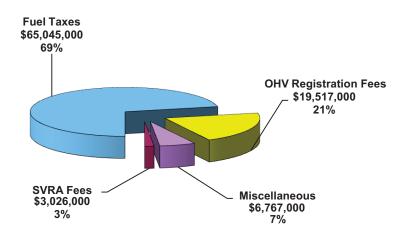


- Provide for the enforcement of Division 16.5 (commencing with § 38000) of the Vehicle Code and other laws regulating the use or equipment of off-highway motor vehicles in all areas acquired, maintained, or operated by funds from the fund; however, the Department of the California Highway Patrol (CHP) shall have the responsibility for enforcement on highways.
- Complete by January 1, 2009, a strategic planning process that will identify future off-highway motor vehicle recreation needs, including, but not limited to, potential off-highway motor vehicle parks in urban areas to properly direct vehicle operators away from illegal or environmentally sensitive areas. This strategic planning process shall take into consideration, at a minimum, environmental constraints, infrastructure requirements, demographics limitations, and local, state, and federal land use planning processes. The Strategic Plan shall be reviewed by the Commission and updated periodically.

### **Program Funding**

The OHMVR Program receives no support from the state's general fund; all funding comes from the OHV Trust Fund. Monies deposited into the OHV Trust Fund are generated by user fees associated with OHV recreation, including:

- Fuel taxes from gasoline consumed during off-highway recreation on public lands
- OHV registration fees
- Entrance fees generated at the SVRAs
- Interest and miscellaneous income



### Off-Highway Motor Vehicle Recreation Division Income FY 2008/2009

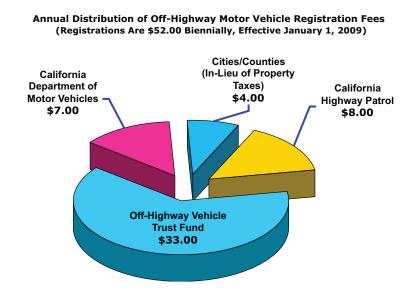
Note: FY 2008/2009 is the most recent year for which actual numbers, not projections, are available.

### **Fuel Taxes**

Fuel taxes represent approximately 70% of annual income to the OHV Trust Fund. SB 742 established that the percentage of fuel taxes transferred in FY 2007/08 represented the appropriate level of support from the Motor Vehicle Fuel Account (MVFA) for the OHMVR Program, and that this level of support would continue on an annual basis. This method represented a significant change from the previous methodology that based transfers from the MVFA on a fuel tax study which attempted to quantify the amount of gasoline burned in the course of motorized off-highway recreation.

### **OHV Registration Fees**

Another source of income to the OHV Trust Fund is fees paid to register vehicles which are operated exclusively off-highway. This registration is commonly referred to as a "Green Sticker." Registration fees are currently \$52 for a two-year registration. Of this amount, \$33 is directed to the OHV Trust Fund, and the remainder is distributed to the CHP, California Department of Motor Vehicles (DMV), and to counties (in-lieu of property taxes).



It is noteworthy that the OHV community supported SB 742 which doubled the cost of OHV registration from \$25 to \$50 every two years. In 2009, as a result of specific sections of the CVC which raise the amount of money to be collected for CHP based on increases in the Consumer Price Index, the CHP portion of registration fees was increased from \$6 to \$8, raising the total registration cost to its current level of \$52.

The funds allocated to the Division by the Governor and Legislature are used to achieve the legislatively established goals for the OHMVR Program. In FY 2009/10, OHV Trust Funds allocated to the Division totaled slightly over \$91 million, and were used to support OHMVR program activities at the following levels:

- Grants Program (appx. 31%)
- Operation of the SVRAs (appx. 28%)
- Division operations (appx. 17%)
- Pro-rata support of state administrative agencies and administrative overhead costs to California State Parks (appx. 14%)
- Capital outlay (appx. 10%)

The funding for Division operations provides for centralized program activities performed to support both the Grants Program and the SVRAs, as well as other necessary functions related to implementation of the OHMVR Program statewide.

### **Capital Improvements and Acquisition Projects**

Acquisitions and capital improvement projects are funded from any excess revenue to the OHV Trust Fund over the amount budgeted for routine program operating expenses. For several years funds available for acquisition and capital improvement projects accumulated and remained unallocated while the Division and the Commission worked on the Strategic Plan to develop a shared vision for the OHMVR Program and establish priorities for the goals and objectives for the future of the Program, including acquisition priorities for additional facilities and areas.

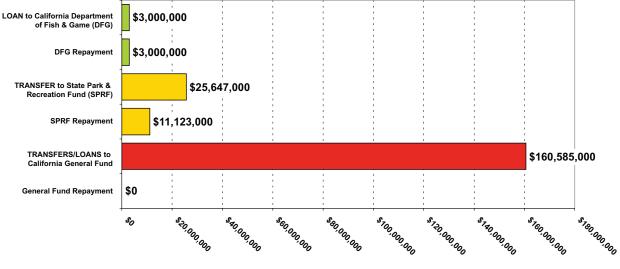
### Loans and Transfers from the OHV Trust Fund

Throughout the history of the Program, monies from the OHV Trust Fund have been borrowed for purposes outside the intent and mission of the Program. The first Budget Act borrowing of funds occurred in FY 1982/83 in the amount of \$8.5 million; less than a year later in an extraordinary session of the Legislature another \$13 million was transferred to the General Fund. Since that time, the total amount of monies borrowed from the OHV Trust Fund have reached approximately \$190 million. Some of those monies were subsequently repaid and others were recovered through legal actions described below. The state's general fund and the State Park and Recreation Fund have been the primary beneficiaries of these loans. Monies were also loaned to the State Fish and Game Preservation Fund (SFGPF). This loan to SFGPF was subsequently repaid to the OHV Trust Fund.

An audit by the Auditor General in 1976 discovered that an additional \$1.5 million that was promised to go to the OHV Fund for acquisition of an OHV area as a specific ballot provision in the 1974 Park Bond Act was never appropriated for that purpose by the Department, and it uncovered other irregularities in how the Department was billing the OHV Fund for non OHV-related staff costs.

In 1994, Chapter 1004, Statutes of 1994, converted the "OHV Fund" to an "OHV Trust Fund," thus providing additional security and status. The legislation also specified loans from the Fund be repaid as follows:

Any money temporarily transferred by the Legislature from the Off-Highway Vehicle Trust Fund to the General Fund shall be reimbursed, without interest, by the Legislature within two fiscal years of the transfer.



Summary of Diversions/Loans from the Off-Highway Vehicle Trust Fund

Note: Dollar amounts reflect principal only.

In the mid-1990s, members of the OHV community sued the state for the reimbursement of over \$50 million that had been transferred from the OHV Trust Fund to the general fund to augment deficiencies in the Resources Agency budget. Unlike the previous temporary transfer to SFGPF, these transfers had no provisions for eventual repayment to the OHV Trust Fund. The court ruled in favor of the OHV community and ordered repayment of the money to the OHV Trust Fund. In a subsequent suit over the original \$21.5 million that was taken in 1982 and 1983 which the Legislature later deemed to be a loan under the provisions of legislation chaptered in 1983, the court also ruled in favor of the OHV plaintiffs. The judge, in his briefing, confirmed the State had not registered the loans in order to track and repay them. The Department of Finance (DOF) acknowledged this in a Budget Briefing Memorandum dated November 5, 1998,

and "recommended a process be documented for requesting and tracking the \$21.5 million." The specific statutory language associated with this case dictates funds are to be repaid when the projected requirements of the OHV Program exceed the amount available in the OHV Trust Fund.

Chapter 1007, Statutes of 1983 reads:

At any time on or after July 1, 1984, the Director of Finance determines that the Off-Highway Vehicle Fund has become, or is about to become, encumbered in excess of the moneys [sic] available in the fund, the Director of Finance shall direct the Controller to transfer from the General Fund to the Off-Highway Vehicle Fund whatever funds are necessary to cover the encumbrance, up to a maximum of the amount specified in this section.

In 2005, the BSA issued a finding that there was a lack of a shared vision between the Division and the Commission. Because of this lack of a shared vision, requests to fund large capital outlay projects, such as land acquisitions, were denied by the DOF, leading to an accumulation of unspent funds.

In FY 2008/09, \$90 million of accumulated monies was borrowed from the OHV Trust Fund. Budget language was passed which said, notwithstanding other provisions of law (e.g., the twoyear requirement for repayment of funds), the loan was to be repaid in four years, no later than June 30, 2013.

In FY 2009/10, an additional \$22 million was borrowed from the OHV Trust Fund. No modification of the repayment requirement was made; these funds are due back to the OHV Trust Fund two years from the time of the loan, June 30, 2012.

Subsequent to the passage of SB 742, the Division and Commission developed a shared vision and together published a Strategic Plan for the next five years.

### **General Planning**

SVRAs are established to provide the fullest public use of quality OHV recreation areas while meeting soil and wildlife protection standards. California State Parks is guided by PRC Section 5002.2 to prepare general plans for units of the State Park System. General planning, an important and critical decision making process for management of the SVRAs, provides the policy guidance for the development, management, and operation of SVRAs to sustain OHV recreation for both the long- and short-term so as to provide ecologically balanced recreation. General plans must be approved by the Commission.

In 2007, the Division performed a review of existing general plans for the SVRAs and determined that six parks needed to initiate or update their general plans. The Division secured a contractor

to perform the work, identified multiple-year existing support funds for redirection to this critical need, and continues to seek appropriated funding in upcoming Budget Change Proposal (BCP) cycles to complete this planning process.

| Park Unit            | Adopted                        | Amended | GP Status & Updates in<br>Progress                  |
|----------------------|--------------------------------|---------|-----------------------------------------------------|
| Carnegie SVRA        | 1981                           | -       | Preparations are underway to update the GP          |
| Clay Pit SVRA        | n/a                            | -       | GP in progress. Expected completion: 2011           |
| Heber Dunes SVRA     | Park pur-<br>chased in<br>2007 | _       | GP in progress. Expected completion: 2011           |
| Hollister Hills SVRA | 1978                           | 2003    | -                                                   |
| Hungry Valley SVRA   | 1981                           | -       | GP update pending budget<br>year allocations        |
| Oceano Dunes SVRA    | 1975                           | 1991    | -                                                   |
| Ocotillo Wells SVRA  | 1981                           | _       | GP is being updated to reflect 60,000 acre increase |
| Prairie City SVRA    | 1991                           | _       | GP update pending budget<br>year allocations        |

### SVRA General Plans

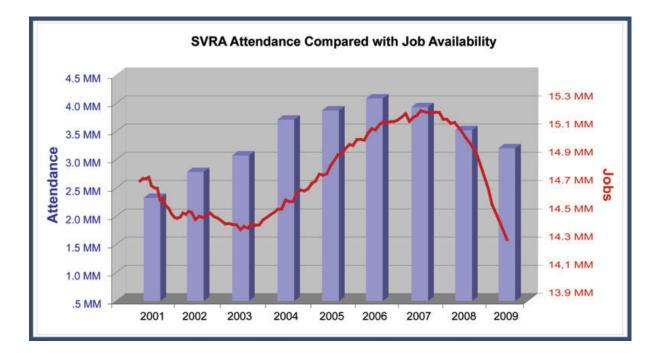
### **SVRA Visitation**

From 2001-2006, as the popularity of OHV recreation grew in conjunction with a growing economy, visitation to the SVRAs nearly doubled. California State Parks recognized motorized recreation as gaining popularity and predicted its continued growth in its 2005 publication, *Park and Recreation Trends in California*. However, towards the end of the decade, downturns in the economy resulted in reduced visitation at all state parks, including the SVRAs.

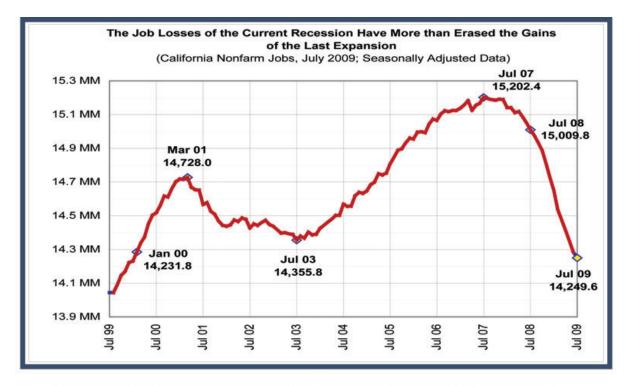
### **Effects of the Recession on Visitor Attendance at the SVRAs**

Over the past several years, the depth of California's economic recession has resulted in decreased visitation to the SVRAs in particular, and California State Parks in general.

Unemployment in California has risen to record high levels, with workers and families facing one of the toughest job markets in decades. According to the California Employment Development Department (EDD) the United States economy officially entered into a recession in 2007.<sup>1</sup> By 2009, California's unemployment rates had risen to one of the highest levels in recorded history



# The progression of California's current recession and impacts on SVRAs is clearly reflected in these charts.

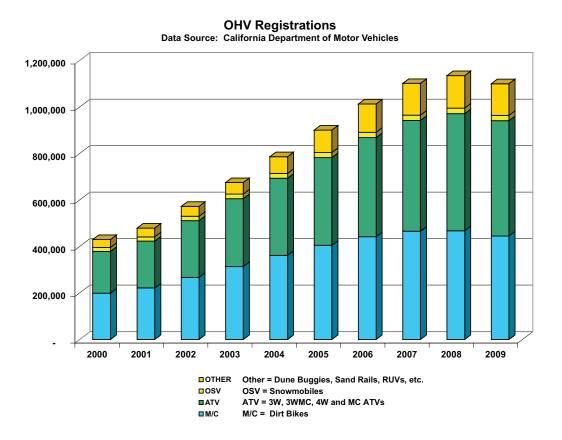


Graph adapted from Employment Development Department, State of California, A Labor Day Briefing for California, September 2009

at 11.9%, with deeper job losses and a steeper rise in unemployment than the nation as a whole.<sup>2</sup> EDD indicates falling home equity, mortgage rate resets, a surge in home foreclosures, and an increase in gas prices forced California consumers to cut back sharply on spending.<sup>3</sup>

Statewide, SVRA visitation data shows a strong parallel with EDD's findings related to job loss and unemployment. The economic downturn has caused many people to reevaluate their purchases, expenses, and budgets. When the recession began in 2007, SVRA attendance began to fall as well. OHV recreationists, like all other Californians, continue to be impacted by the effects of the recession.

However, despite financial hardships, registration data collected by DMV indicate that owners of OHVs are maintaining current registrations on existing equipment. These trends suggest that owners of registered OHVs may be choosing to recreate closer to home, rather than drive long distances to one of the eight SVRAs.



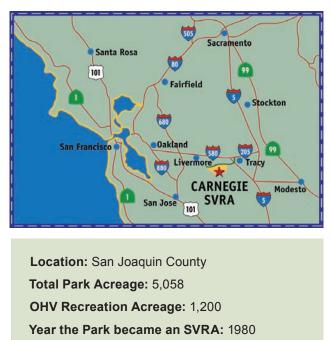
### **State Vehicular Recreation Areas**



### **Overview of State Vehicular Recreation Areas**

### **Carnegie SVRA**

Carnegie SVRA is located in the hills of southern Alameda and San Joaquin counties between the cities of Livermore and Tracy. The landscape at the park is characterized by dry rocky washes, rolling hills, and steep, rugged canyons rising abruptly out of the floodplain. The SVRA provides 1,200 acres of OHV recreation opportunities. The park is a distinctive setting for OHV recreation of all skill levels and offers beautiful scenic vistas for trail riding. The SVRA is especially suited for motorcycle use because of its steep hills and narrow trails. The canyons offer a variety of terrain for trail riding, including some extremely challenging hill climbs. Park elevations range from 650 to 1,750 feet above sea level, and the weather is generally a semi-arid



Mediterranean type with wet, mild winters and long, dry summers.



### **Recreational Opportunities**

### **OHV Recreation**

While Carnegie SVRA is known for its extreme hill climbs and single track trails that traverse the hills, there is also great opportunity for 4x4s, all-terrain vehicles (ATVs), and RUVs including trails, open riding, a 4x4 play area and obstacle course, and motorcycle and ATV tracks. The valley floor offers a variety of tracks including

a motocross track for dirt bikes only, an ATV and dirt bike track, a beginner track designated for vehicles with small engines up to 70cc, and an intermediate

track designated for vehicles with engines up to 110cc. The riparian area through the valley floor is protected with designated crossings to access trails in the hills.



### **Education Programs**

Carnegie SVRA offers the Junior Ranger program and hosts the Off-Road PALs program. In addition, staff provides educational opportunities through community and school outreach programs. Carnegie staff participates in local community and historical special events held in Tracy and Livermore. During these events, OHV safety, regulations, and recreation opportunities are



discussed. The SVRA also hosts a variety of OHV special events at which park visitors are educated on the importance of staying on trails, out of creeks and streams, away from wildlife, and out of closed areas.

### **Special Events**

In the spring of each year, Carnegie hosts the National Championship Hillclimbs. The State Championship Hillclimbs take place in the fall. Throughout the year

manufacturers test their product lines in the park, provide riding instruction for their staff, and utilize the rugged terrain to test for vehicle safety.



### **Facilities**

### **Day Use and Camping**

Day use staging areas are located throughout the park and offer shade ramadas, picnic tables, and restrooms. Day use hours vary depending upon the time of year; however, the park is closed to OHV recreation at night. Twenty-three designated campsites are available on a first-come, first-served basis. Sites are equipped with a picnic table, shade ramada, and fire ring. Potable water, flush toilets, and showers are provided near the campsites.



Carnegie Brick

### Park History

In 1855 railroad surveyors discovered coal in Corral Hollow which led to the building of California's first commercial coal mine and the town of Tesla. High quality clay was later found in the area, which led to the construction of the Carnegie Brick and Pottery Company in 1902. Owner John Treadwell named his newest enterprise after a man he admired, philanthropist Andrew Carnegie. A small town of about 350 sprung up that included a hotel, two bunkhouses, a bakery, saloon, slaughterhouse, school, and 17 homes. By 1910 as many as 110,000 bricks a day were being shipped all over California stamped with the name "Carnegie." However the bank that held the mortgage on the brick plant failed despite high demand for brick, and by late 1916, the company faced financial ruin and was sold.



Carnegie Plant

The new owners destroyed the town's remaining buildings and sold off the factory's equipment. Remnants of Carnegie's past, including building foundations, railroad routes, and lime kilns, can still be seen throughout the park today. Carnegie Brick and Pottery Company's legacy continues in buildings built with Carnegie brick and terra cotta such as the Oakland Hotel, the Los Angeles County Natural History Museum, and the Carnegie Libraries in Livermore and Lodi. The land was



Graner Hotel

### **Park Resources**

next occupied by private ranches, predominantly for cattle grazing.

By the early 1940s motorcyclists had discovered the durable clay soils of Corral Hollow to be good for OHV recreation. In 1970, Carnegie was purchased for a private motorcycle park, known as the Carnegie Cycle Park. Improvements were made to the park, but due to increasing insurance costs and operating expenses, the property was sold to the state for \$1.2 million in 1979.

Carnegie SVRA is in the California Floristic Province. The province includes plant life especially adapted to warm Mediterranean climates of wet, mild winters and long, dry summers. While mostly oak studded grasslands, the park is home to an impressive display of spring wildflowers and some special California native plants. The park is also home to the federally-listed threatened California red-legged frog and the California tiger salamander, as well as a wide range of bird species and mammals.

Protecting resources today makes it possible to provide quality OHV recreation in the future. Carnegie continues this history of resource protection by utilizing a comprehensive trails management program which combines the expertise of environmental scientists, maintenance supervisors, equipment operators, planners, and managers. This multi-disciplinary team approach ensures monitoring of wildlife habitat, improved trail design and layout, successful revegetation and rehabilitation projects, maintenance of roads and trails, and the protection of stream habitats.

Carnegie has an active California Archaeological Site Stewardship Program (CASSP). In this program, trained volunteers work with professional archaeologists to protect the archaeological and historical resources by regularly visiting sites and recording changes.



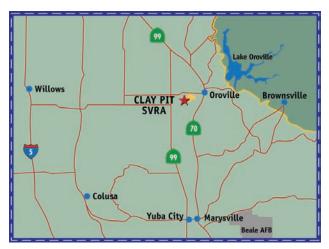
The condition and status of the natural and cultural resources, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.

Live Oak

### **Clay Pit SVRA**

Clay Pit SVRA is located approximately two miles west of the town of Oroville and approximately 30 miles north of Yuba City, in Butte County. Present-day Clay Pit SVRA was excavated to construct Oroville Dam in 1964. Clay was mined from the area to construct the core of the dam. The result of this work left a depression in the ground—a large, shallow, bowl-shaped pit and an undulating landscape ringed with low hills. Clay Pit SVRA is a 220-acre fenced open riding area that offers beginner riding terrain for motorcycle, ATV, four-wheel drive, and dune buggy enthusiasts.

The elevation of Clay Pit SVRA varies from 50 to 150 feet above sea level. The climate is variable—generally warm during the summer with temperatures in the 70s, and cold during the winter with temperatures averaging in the 40s.



Location: Butte County Total Park Acreage: 220 OHV Recreation Acreage: 220 Year the Park became an SVRA: 1981

### **Clay Pit General Plan**

The Division is in the process of developing a General Plan for the Clay Pit SVRA. The General Plan will serve as a guidebook for future development and enhancements to the park. It will establish a long-term vision and management direction for the park, identify potential recreation and facility improvements, resource stewardship, and appropriate public use. An Environmental Impact Report (EIR) will be prepared concurrent with the General Plan. Public involvement and input is essential in the formulation of the park's programs and management priorities. The Division has initiated a stakeholder-driven process whereby issues and ideas voiced by community



members will help guide project research, alternatives development and analysis, and recommendations.

### **Recreational Opportunities**

#### **OHV Recreation**

Clay Pit SVRA offers primarily open riding and informal trails for those riding motorcycles, ATVs, and dune buggies. The park provides ideal beginner OHV terrain, and is a nice place for families to gather, watch people recreate, and picnic under the cottonwood trees.

### **Educational Programs**

The SVRA provides interpretative panels for visitor education purposes. Additional education programs are currently being developed and will consist of a variety of education and safety programs, including activities that focus on learning about, and protecting the park's resources, safe OHV operations, and possible Junior Ranger activities.

### **Facilities**

### **Day Use and Camping**

Clay Pit SVRA is for day use only. There is no camping at this facility. It is open from 8:00 a.m. until sunset, seven days a week. Facilities available at the park include shade ramadas, picnic tables, and a vault toilet.



### **Park History**

The history of Clay Pit is tied to the statewide effort to create reservoirs during the construction of the State Water Project. The State Water Project was authorized by the voters in 1960 and is now the nation's largest state-built water and power development and distribution system. It was primarily created to help supply additional water to the expanding populations in San Francisco and Los Angeles, but also helped to address concerns about devastating floods that happened a few years before. Included in the project was the construction of Oroville Dam. After the dam was completed, site ownership was retained by the California Department of Water Resources (CDWR) and Department of Fish and Game (CDFG). Further study of Clay Pit has the potential to yield information about early California gold dredging activities and the State Water Project.



In 1981, California State Parks was issued an operating agreement for the site for the purpose of establishing, operating, and maintaining an OHV area and providing for associated recreation on the property. The Northern Buttes District of State Parks managed the area until July 1, 2009, when it was then transferred to the Division. Today, it is operated by the Twin Cities District.

### **Park Resources**

Due to the heavy disturbance of the land as a result of the excavation, habitat diversity is limited at Clay Pit. Despite its limitations, however, the park is home to a variety of wildlife, including blacktailed jack rabbits, western fence lizards, deer, and coyotes. The park is also home to a variety of bird species, including golden eagles, red-tailed hawks, killdeer, prairie falcons, and northern flickers. Vegetation within the park consists of low growing grasses and wetland vegetation. Fremont cottonwoods are also found scattered throughout the park, offering areas of shade for park visitors in the summer months.



Jackrabbit

The excavation of Clay Pit for the construction of the Lake Oroville Dam significantly altered the natural surface. Any prehistoric archaeological sites that may have existed in the interior of Clay Pit SVRA prior to the 1964 excavation, or possibility for relocation of those sites, have since been destroyed. However, the park does contain dredge tailings dating to the gold rush era; field surveys conducted by OHMVR archaeologists identified one previously undocumented historic-era site.

The condition and status of the natural and cultural resources in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.



Overview of borrow area for Lake Oroville Dam; now Clay Pit SVRA

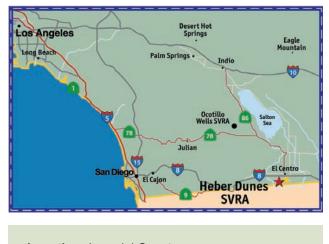


Material on train leaving Clay Pit for dam site

### **Heber Dunes SVRA**

Heber Dunes SVRA is located in the Southern Imperial Valley, a rich and intensively farmed agricultural area in the California desert. The park is situated approximately 10 miles southeast of the city of El Centro and two miles north of the Mexican border in Imperial County. The SVRA, a family-oriented park, became an SVRA in 2007. Although Heber Dunes SVRA is a relatively small park, encompassing 380 acres, it fulfills an important local recreational need, is close to home, and is a setting for many families to gather, picnic, and socialize.

Elevations at Heber Dunes SVRA are typical of low desert environments. The park is approximately 11 feet above sea level, has intensely hot summers, with several months



Location: Imperial County Total Park Acreage: 380 OHV Recreation Acreage: 380 Year the Park became an SVRA: 2007

of temperatures over 100 degrees, often exceeding 115 degrees. Night time lows for most of the summer are in the high 80s. Winters are mild, and frosts uncommon.

### Heber Dunes General Plan

The Division is in the process of preparing a General Plan and associated EIR for Heber Dunes SVRA. The General Plan will establish the park's primary purpose and management direction for its future. Initial General Plan research and analysis efforts included examination of existing conditions, public outreach, and identification of issues and opportunities. Through a public process, goals and guidelines are being developed to

guide management direction for long-term use of the park.

### **Recreational Opportunities**

### **OHV Recreation**

Heber Dunes SVRA is a small park frequented by families and friends who enjoy picnicking, barbecuing, and recreating or watching people recreate on OHVs. The sand dunes and dense



groves of tamarisk trees that prevail throughout the park offer a unique desert recreation experience, providing winding trails and paths, and interesting terrain for the OHV enthusiast. The trees

provide shade—an oasis in the desert environment. The SVRA is a popular destination for the local community and those who enjoy recreating on ATVs. Dune buggy, RUV, and motorcycle enthusiasts visit the park as well.

### **Training Track**

Heber Dunes SVRA has a youth training ATV/dirt bike track designated for riders 12 years old and under, riding 70cc or less. This is a great place for kids to ride under the watchful eye and guidance of their parents.

### **Educational Programs**

The SVRA offers ATV safety classes and education materials in both English and Spanish. Additional education and outreach programs are being developed and will include activities that focus on safe OHV operation, Junior Ranger activities, and protecting park resources.

### **Facilities**

### **Day Use and Camping**

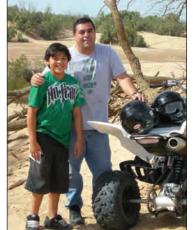
Heber Dunes SVRA is for day use only. Facilities available at the park include shade ramadas, barbecue pits, picnic tables, and restrooms. There are no camping facilities at the park.

### Park History

Native Americans, with an intimate knowledge of the area's natural resources, lived and traveled throughout the region for centuries. Early Spanish explorers trekked across the land leading scouting parties in search of an overland route to Alta California.

Eventually, industrious farmers developed much of the Imperial Valley and the land surrounding Heber Dunes SVRA for agricultural purposes. The abundant trees, heavy clay, sand dunes, and salt accumulations in the soils made the conversion of Heber Dunes SVRA to farmland a daunting task unlikely to result in economic gain. The very reasons this area was not well suited for farming made it an ideal location for recreation. As a result, Heber Dunes SVRA remains an isolated parcel of undeveloped land surrounded by agriculture and urbanization to the west. For over 30





years, Imperial County administered Heber Dunes SVRA until California State Parks entered into a lease agreement to operate the park in 2000. Title to the park was officially deeded to State Parks in 2007.

#### **Park Resources**

Surrounded by farms, highways, and canals, Heber Dunes SVRA is a small oasis in the Imperial Valley. The park is visited by migrating birds,



especially north-bound birds in the spring, and is a place for doves to nest and seek refuge. Though not indigenous to the area, the tamarisk trees thrive in the



Agricultural fields in the background

Redwing Blackbird

salty, sandy soil. A diversity of wildlife populations find shelter amongst

the trees, a plentiful food source in the adjacent hay and grain fields, and plenty of water in the canals which surround the park.

The stark environment of Heber Dunes, formerly dominated with creosote brush, shifting sands and occasional episodic flooding, may have made the area unattractive to long-term settlement. The recent cultural resources inventory completed by the park provides a good understanding of the history and resources of the area.



King Snake



Popcorn flower

The condition and status of the natural and cultural resources

in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.

# **Hollister Hills SVRA**

Hollister Hills SVRA was California's first SVRA. Tucked into the Gabilan Mountains, the park is located in San Benito County, approximately eight miles south of the town of Hollister, and about an hour's drive south of San Jose. Oak-studded hillsides form the backdrop for the park, which also features picturesque rolling hills and springtime wildflower displays. This island of open space is surrounded by agricultural lands, homes, and wineries. The park covers more than 7,100 acres of varied terrain divided between the Upper Ranch and Lower Ranch.

In addition to the rich cultural history, visitors are drawn to the park's extraordinary landscape, ranging from deep oak forests, lush canyons, native grasslands, and the many



Location: San Benito County Total Park Acreage: 7,100 OHV Recreation Acreage: 3,600 Year the Park became an SVRA: 1975

miles of OHV opportunities. Hollister Hills SVRA is a family-oriented park that provides a wide selection of OHV adventures for campers, picnickers, and outdoor enthusiasts. Elevations at the park range from 660 feet to 2,425 feet. The average monthly temperature varies from the low-to-mid 90s in summer, to the low 30s to upper 50s in winter.

# **Recreational Opportunities**

#### **OHV Recreation**

Hollister Hills SVRA offers diverse recreational opportunities for the entire family. The SVRA is divided into two areas: the Lower Ranch and the Upper Ranch. Each area has been



set aside for specifically dedicated forms of OHV recreation.

#### The Lower Ranch:



This 3,300-acre area is set aside for dirt bike and ATV use on more than 128 miles of trails. Additional OHV opportunities include a variety of tracks and open play areas. Specific riding areas are also available for



children, limited to 90cc or smaller motorcycles and ATVs.

**The Upper Ranch:** The 800+ acre Upper Ranch includes a Grand Prix Track, two obstacle courses, and trails that offer exciting and challenging off-highway fun for 4x4 recreation.

Hollister Hills recently opened two new areas of the park: the Renz and the Hudner properties. The Renz is a 1,600-acre portion of the

Lower Ranch that provides a unique riding experience. The Hudner is located across Cienega Road from both the Lower and Upper Ranches and consists of approximately 1,500 acres of rolling hills with beautiful views of both the Cienega Valley and the town of Hollister. The Renz and Hudner properties represent an improved way of approaching trail design for OHV recreation, focusing on narrow trails, frequent grade changes, rolling trail contours, and trails designed to minimize impacts of sound on nearby neighbors. The properties highlight how this type of trail design can protect the natural and cultural.

#### **Nature Area**

The Nature Area is a non-motorized area of the park available for hiking and mountain biking. The 300+ acre area offers a network of scenic trails for exploration and nature viewing.

#### **Education Programs**

The park offers its visitors an assortment of education programs, including OHV safety training, nature programs, OHV maintenance clinics, guided and self-guided tours, campfire programs, living history programs, school field trips and presentations, and outreach events (e.g.,



San Benito County fair, parades, recruitment shows). The park sponsors Junior Ranger OHV programs and hosts the Off-Road PAL program. These programs provide a fun and interesting way for kids to learn about the park, practice safe and responsible OHV use, and gain a greater understanding about the natural and cultural resources in the park.

#### **Special Events**

Areas within the park are available for a variety of special events. Nationally televised Hare Scrambles and four-wheel drive events occur annually within the park. Additional events include charity fundraisers, OHV events geared towards kids, and a unique national vintage motorcycle show and race that draws people from around the country.



#### **Facilities**

#### Day Use and Camping

Hollister Hills SVRA is open year round for OHV use. There are a variety of campgrounds differing in size, from smaller sites to areas set aside for large groups. The campsite amenities include showers, flush toilets, picnic tables, and fire rings.



# Park History

The lands of Hollister Hills were once inhabited by the Ohlone Indians, a Native American people of the central California coast. During the late 1700s Spain established control of the region and built nearby Mission San Juan Bautista in 1790. The Mexican government later divided the San Juan Bautista lands into two land grants: Rancho San Justo and Rancho Cienega del Gabilan. Today, Hollister Hills SVRA is located on parts of both of these former land grants.

Hollister Hills was formerly a family ranch originally owned by Jesse Whitton who obtained it as the land grants were being divided and sold. He was a civilian surveyor for the John C. Fremont expedition, which traveled through the area in 1846. After the expedition, Jesse returned to the area and successfully purchased 600 acres for \$50 per acre. Upon Jesse's death, the land was passed on through the family, and in 1959, Howard Harris inherited the land from his aunt, Casse Crow.



Casse Crow

Howard used the land for a multitude of activities including mining, geology classes, farming, ranching, hunting, and finally as an OHV area.

OHVs were first used on the ranch in 1947 when Bird Creek Hunting Club was organized. Jeeps, motorcycles, and "tote-goats" were used for transportation around the ranch as well as to control trespassing. Howard built the majority of the existing park trails while operating the ranch as a motorcycle park. He continued to manage the ranch until October 1, 1975, when the land originally purchased 110 years earlier by Howard's great-grandfather, became Hollister Hills, California's first SVRA.

#### **Park Resources**

The SVRA's landscape of oak woodlands, chaparral, and grasslands provide habitat for the park's numerous species and habitats including the federally-listed threatened California red-legged frog and California tiger salamander, bobcat, several different raptors, mountain lions, flycatchers, and the California thrasher. Riparian corridors along both Bird Creek and Azalea Canyon also provide important habitat for a variety of wildlife species.

Trails are designed for long-term sustainability in areas that have been strategically chosen for their durability and minimal impact to the surrounding resources. With adaptive resource management and the use of best management practices, motorized recreation is carefully bal-

White Azalea



Bird Creek

anced so as to reduce the impacts to

sensitive species within the park. Vegetation management, habitat enhancement, and restoration are programs used throughout the park to sustain and protect the species most at risk.

The condition and status of the natural and cultural resources in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.

# **Hungry Valley SVRA**

Hungry Valley SVRA is located directly south of the town of Gorman near Tejon Pass, paralleling Interstate 5. The park lies in parts of Los Angeles, Ventura, and Kern Counties. The SVRA provides recreation and OHV opportunities serving the needs of the Central Valley and the greater Los Angeles metropolitan area. The park offers 17,000 acres for recreation and more than 130 miles of trails for motorized use.

Hungry Valley is a distinctive area, where diverse geological and biogeographical elements converge. The topography in the SVRA ranges from flat, broad valleys and gentle rolling landscapes, to sharp hills and steep-sided canyons that set off the more rugged hills and mountains within the park. This varied terrain pro-



Location: Kern, Los Angeles and Ventura Counties Total Park Acreage: 19,000 OHV Recreation Acreage: 17,000 Year the Park became an SVRA: 1980

vides unique opportunities for OHV enthusiasts, not to mention beautiful panoramic views of vast open spaces and vistas. Elevations at the SVRA range from 3,000 feet to nearly 6,000 feet. Hungry Valley is a semi-arid place. Summers are often hot, with temperatures ranging from the mid-90s to low 100s. In contrast, the winters can be quite cold; snow is not uncommon. Spring provides some of the most spectacular wildflowers displays in the California State Park system.

#### **Recreational Opportunities**

#### **OHV Recreation**

Individuals with all levels of OHV operator skills can enjoy the wide variety of terrain and trails available



at the SVRA and the adjoining Los Padres National Forest. Motorized recreational opportunities includes



open areas, dedicated trails, tracks, play areas, special use areas, and a four-wheel drive obstacle area. In addition to the more than 4,000 acres available for open riding, there are approximately 130 miles of developed trails. The SVRA also features the Quail Canyon Special Use Area, which includes the Quail Canyon Motocross Track, a premier motocross track designed by Roger Decoster. This area is a family-oriented facility offering track opportunities for a broad variety of OHV events.



# Los Padres National Forest, Angeles National Forest, and Pyramid Lake

These areas are located adjacent to Hungry Valley SVRA and offer additional recreation options including camping, hiking, hunting, OHV recreation, and boating opportunities on nearby Pyramid Lake. Hungry Valley SVRA is the main access point to Piru Creek and Alamo Mountain in the Los Padres National Forest, popular day use destinations. From the SVRA, OHV enthusiasts have easy access to Alamo Mountain.

#### Wildflower Viewing

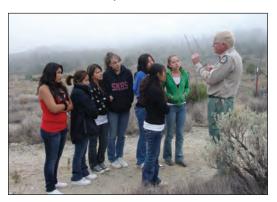
During the wildflower season, Hungry Valley SVRA offers a self-guided tour route, two-hour guided wildflower tours by staff, maps, and hiking opportunities throughout the park. In the spring, the wildflowers in the area are world renown for their color and abundance as the grassy hillsides turn brilliant shades of orange, yellow, and purple. During the springtime, park staff produces a weekly, updated flower guide on the wildflower bloom. It is available at the district office, website, and visitor kiosks.



California Poppies and Lupines

#### Hiking

The SVRA offers an easy half-mile hike through the Oak Woodland Natural Preserve. The 60-acre natural preserve is located in the northwest area of Hungry Valley SVRA. Water from a



natural seep supports a rare habitat of immense valley oaks with an understory of native grasses in this area.

#### **Educational Programs**

Park staff offers a variety of education programs for the public's enjoyment and to enhance their knowledge of park resources. Programs include Junior Ranger activities, group nature hikes, wildlife viewing, and onsite school programs. The park's education program provides valuable learning opportunities for local school groups including park tours, nature hikes, wildflower and Oak Woodland Natural Preserve tours, and Native American history lessons. The SVRA's Junior Ranger OHV program provides a fun and interesting way for kids to learn about the park. It also provides an important opportunity to educate kids—and parents—about OHV use, rider safety and respect for the park's natural and cultural resources. Additionally, in coordination with



the Police Activities League (PAL), the park hosts the Off-Road PALs program.



#### **Facilities**

#### **Day Use and Camping**

Hungry Valley SVRA is open for day use and camping seven days a week. There are approximately 150 campsites throughout the park, including nine semi-developed campgrounds which include shade ramadas, picnic tables, fire rings, and vault restrooms. Day use parking is allowed at any of the nine campgrounds with access to the established trail system.

#### **Park History**

The park lands were originally home to the Tataviam tribe of Native Americans who practiced a hunting and gathering lifestyle. The tribe occupied the area until they were displaced by Euro-American influence in the 18<sup>th</sup> century.

Hungry Valley was later the site of homesteading and ranching activities for more than 100 years. The sparsely inhabited region of Hungry Valley was used mainly by Anglo settlers between 1890

and 1940. The ruggedness of the terrain in the area, and the barren and marginally productive farmland meant that homesteaders in Hungry Valley lived under harsh economic conditions and settlement came slowly.

Besides agriculture activities, construction and installation of oil pipelines and roads, as well as mining activities occurred in the early 1900s. The 1920s and 1930s saw a variety of homesteading activities. However, most of these



Remnants of an old homestead

small homesteads failed and were ultimately wiped out by drought. Thereafter, most of the land in the Hungry Valley area was maintained by large landowners until it was purchased from the 1940s through the 1970s by state and federal government agencies. Most of the land in Hungry Valley SVRA was acquired by California State Parks between 1978 and 1980.

#### **Park Resources**

Hungry Valley SVRA boasts broad vistas, rolling hills, and terraces carpeted with wildflowers, valley oaks, and native grasses. Hungry Valley staff work diligently to provide its visitors with quality OHV recreation while carefully balancing the impacts of OHV use with the protection of the park's natural and cultural resources. Staff regularly monitors the parks resources (e.g., various plants and animals), and fix and stabilize eroded areas. Selected areas of the park are also closed to protect sensitive resources (e.g., native grasslands, valley oak woodlands and areas with highly erosive soils).



Valley Oaks



Annual Yucca bloom near Hungry Valley Road

Several different types of grassland communities occur in the SVRA. The park's riparian community is dominated by trees and shrubs, and the oak woodland community is dominated by valley oak, with an understory of primarily grasses and forbs. Hungry Valley is in the California Wildlife Region. A diversity of habitat in the SVRA supports a variety of wildlife including road runners, golden eagles, black-tailed deer, and bobcats. Coast horned lizards and prairie falcons may also be spotted in the park.

## **Oceano Dunes SVRA**

Oceano Dunes SVRA is located on California's Central Coast in San Luis Obispo County, within the Guadalupe-Nipomo Dunes complex. The SVRA is bordered on the north by the cities of Grover Beach and Pismo Beach, on the east by the city of Oceano, on the south by Guadalupe-Nipomo Dunes National Wildlife Refuge, and on the west by the Pacific Ocean.

The SVRA offers 3,600 acres of beautiful scenery along the Pacific Ocean, including the beach, coastal sand dunes, wetlands, lakes, and riparian areas. Oceano Dunes' topography includes an active dune complex (shifting sand) that is geologically unique. The sand that formed these dunes was carried down to the ocean by rivers and streams, deposited on the beach by ocean currents,



Location: San Luis Obispo County Total Park Acreage: 3,600 OHV Recreation Acreage: 1,500 Year the Park became an SVRA: 1982

and then shaped by the wind into the dunes seen today in a process that is still ongoing. The sand dunes' distinctive features provide for impressive recreational opportunities for OHV enthusiasts visiting from all over the world. The park provides a unique opportunity for visitors to participate in motorized recreation on several miles of beach and coastal sand dunes. The SVRA has been a favorite camping and recreation site for families for over 100 years.

Elevations at the park range from sea level to 200 feet. Oceano Dunes experiences typical Central California coastal weather conditions, with daytime temperatures ranging from the low 50s to the high 70s throughout much of the year. Gusty afternoon wind and morning coastal fog are prevalent in the spring and summer months.

#### **Recreational Opportunities**

#### **OHV Recreation**

Of the 3,600 acres managed by Oceano Dunes staff, 1,500 acres of beach and dunes are available for OHV recreation. The SVRA is a favorite area for Californians to recreate



on the beach and dunes in a wide range of motorized vehicles, from standard highway vehicles to highly specialized dune buggies.

## Training Area

ATV Safety Certificate courses are available at the park in a secure training area. Comprehensive ATV safety education programs provide an important opportunity to educate the public on safe and responsible use of OHVs and raise awareness of the park's resources.



#### Hiking / Birdwatching

In addition to motorized recreation, Oceano Dunes SVRA provides a wide array of other nonmotorized recreation opportunities including hiking, nature walks, and birdwatching. South of the



SVRA is the Oso Flaco Lakes area. This area consists of two freshwater lakes and dune complexes managed for non-motorized recreational uses. Visitors to the Oso Flaco area can enjoy a moderate walk along the onemile Americans with Disabilities Act (ADA) accessible boardwalk, observing wildlife and native plants as the path passes Oso Flaco Lake, leading out to the beach. Oso Flaco Lake is an important stopover for waterfowl traveling along the Pacific Flyway.

Oso Flaco Lake

#### **Horseback Riding**

Horseback riding is welcome in the park. There is an equestrian staging area located near the beach entrance on Grand Avenue. Rides can also be arranged through the commercial stables located near the park.

#### Water Recreation

Surfing, boating, operating personal watercraft, kiteboarding, and paddling are some



of the recreational watersports available at Oceano Dunes SVRA. Since motorized activity is allowed on the beach, those accessing the water for recreational purposes can park their vehicles and easily unload gear near the water's edge.



#### **Education Programs**

Staff at Oceano Dunes SVRA offers and hosts a variety of education and safety programs unique to the

park. Programs include youth safety clinics, Junior Ranger programs, guided walks, campfire programs and more. The park also hosts the Off-Road PALs program. Education and

outreach programs offer a fun and interesting way for both kids and adults to learn about the park and its important resources. Programs also provide an important opportunity to teach visitors about OHV use, rider safety, rules of the road, and how behavior and actions affect the park's natural and cultural resources.



#### **Facilities**

#### **Day Use and Camping**

The park offers primitive beach and dune camping with no designated campsites. Day use access to the beach is available daily from 6:00 a.m. to 11:00 p.m. The camping limit is 1,000 street legal vehicles per day. Camping is also



available off the beach at the North Beach and Oceano Campgrounds. These two campgrounds provide conventional amenities such as picnic tables, fire rings, and restrooms.

#### **Park History**

The Chumash Indians lived in the Oceano Dunes area for thousands of years. Evidence of their presence can be seen in several locations in the dunes in the form of "middens," which are piles of shells left after the Chumash collected them for food. These middens are protected by state and federal law.



Pavilion Hill and Pier circa 1900s

The first documentation of motorized vehicles being operated on the beach was a 1906 newspaper article announcing that Ford Motor Company was meeting in Pismo Beach for a rally between California's northern and southern car dealerships. Early photos depict families enjoying the beach and dunes in horse drawn carriages and on bicycles.



La Grande Pavilion

Pavilion Hill, a large vegetated dune, is named for the huge Victorian style dance pavilion which was built at the turn of the 20<sup>th</sup> century. There was also a pier extending into the ocean in front of the Pavilion. The Pavilion was torn down in 1921 as it was in disrepair after years of existence on a naturally moving sand dune. During the depression years of the 1930s extending into the 1940s, a colony of artists, writers, and others known as the Dunites lived east of the dunes.

The original park land holding was acquired and operated as an SVRA in 1974. It was then called the Pismo Dunes SVRA and it was managed by the California State Parks San Luis Obispo Coast District as an extension of Pismo State Beach. Over the years, additional adjacent properties were acquired, extending the SVRA. In 1982, the California Park and Recreation Commission established a new district and the Division took over active management for the park. Thereafter, the park was named Oceano Dunes SVRA.



Beach Morning Glory

#### Park Resources

A wide variety of plants and animals thrive in the park's harsh environment of sand, salt, and wind, including wildflowers, small mammals, insects, and a variety of small birds including hawks, owls, pelicans, and gulls. Resource management activities focus on protecting vegetated areas of the park, monitoring wildlife and their habitats, and protecting sensitive habitats and endangered species.

Oceano Dunes SVRA provides some of the most productive breeding habitat along the California coast for the federally-threatened western snowy plover and the state and federally-endangered California least tern. During the nesting season from March 1 - September 30, approximately 250 acres of the park's camping and recreation area, and an additional 50 acres in the non-OHV area of Oso Flaco, are closed to protect these species.

The condition and status of the natural and cultural resources in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.



California Least Tern

#### **Ocotillo Wells SVRA**

Ocotillo Wells SVRA is the largest of the SVRAs consisting of 85,000 acres of Southern California desert lands that include state, federal, and recently acquired additions. The SVRA is located near the Salton Sea and covers portions of both San Diego and Imperial Counties. Ocotillo Wells SVRA offers a wide range of opportunities for OHV recreation and exploration, as well as for hiking, biking, geocaching, and camping. In fact, it is possible to explore the park's open environment and varied terrain for days without having to retrace your tracks. Visitors marvel at the many exotically named natural wonders such as Blow Sand Hill, Devil's Slide, and the Badlands.

Elevations at Ocotillo Wells SVRA range from 176 feet below sea level to approximately 400



Location: San Diego and Imperial Counties Total Park Acreage: 85,000 OHV Recreation Acreage: 84,840 Year the Park became an SVRA: 1981

feet above sea level. The extreme terrain and intense climate have challenged both the skills and endurance of OHV recreation enthusiasts for generations.

#### **Recreational Opportunities**

#### **OHV Recreation**

The SVRA offers a variety of OHV recreational opportunities for different types of OHVs. Much of the park is open



Ocotillo

riding while other areas of the park allow riding only on trails and roads.

In partnership with the (BLM, Ocotillo Wells manages and operates BLM lands to the south and east of the park as part of the larger SVRA. The western bound-



ary and part of the northern boundary borders the half-million acre Anza-Borrego Desert State Park, which is open to exploration only by

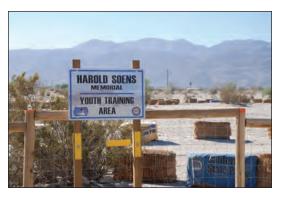


highway-legal vehicles (no non-highway registered vehicles are allowed) along the park's primitive road system.

Self-guided OHV tours are available at Ocotillo Wells SVRA, taking visitors to interesting and unique features throughout the park, including Shell Reef, Barrel Springs, the Pumpkin Patch, and the Gas Domes.

**Youth Tracks** 

The Harold Soens Youth Track is designated for riders 12 years old or younger, riding 70cc or less. It is a great place for kids to ride under the guidance of parent supervision. An ATV Safety Training Area provides a dedicated area where ATV safety classes are offered to the public.





#### Geocaching

Ocotillo Wells SVRA offers a unique location for those interested in geocaching, an exciting recreational activity for the entire family. Participants use Global Positioning System (GPS) coordinates to locate hidden "caches." While the park fully supports responsible geocaching, damage to the cultural and natural resources is never tolerated.

In 2009, Ocotillo Wells SVRA hosted the first ever geocaching event in California State Parks' history. This one of a kind

event, which attracted over 700 people in its first year, provides innumerable opportunities for staff to engage park visitors in the discovery and understanding of the park's natural and cultural resources.

#### Hiking

In addition to the OHV recreation opportunities within the park, there are also many hiking opportunities available. The park offers guided and self-guided walks.



# **Horseback Riding**

Riding is permitted in the park, but no dedicated facilities are available.

#### **Education Programs**

Park staff provides a comprehensive education program from October through April. Programs include desert animal exhibits, star and moon gazing, OHV tours, Junior Ranger activities, and traditional evening campfire programs. The park also hosts Off-Road PALs programs. Education programs available at the SVRA teach and inspire visitors to learn more about the park's resources, the desert, wildlife habitats, and its fascinating geologic features. Visitors can enjoy staff-led geology and wildlife viewing tours on ATVs. In



addition to these programs, SVRA staff also provides outreach and education for schools and youth programs, highlighting desert animal safety, rider safety, and career opportunities.

#### **Facilities**

#### **Day Use and Camping**

Day use and camping facilities are available throughout the park, including open camping for up to 30 days per calendar year. Developed campsite areas include vault restrooms, shade rama-



das, picnic tables, and fire rings. Additional shade ramadas and picnic tables are located throughout the park for day use. Adjacent to the Discovery Center is a day use picnic area which includes an accessible walkway, native plant garden, and interpretive panels.

#### **Discovery Center and Amphitheater**

The Discovery Center features fun and interesting displays about the desert, as well as handson activities for the whole family to enjoy. The

Discovery Center is

also a great place to pick up a park map, a visitor's guide, and a schedule of the week's activities. An ADA accessible amphitheater located just west of the Discovery Center, allows experienced staff to present a wide variety of free programs on archaeology, astronomy, desert wildlife, local history, and many other topics of interest.





#### **Park History**

Ocotillo Wells SVRA has had a rich and varied history. Native peoples lived and traveled throughout the region for centuries. Early Spanish explorers trekked across the land leading scouting parties in search of an overland route to Alta California.

For several decades in the early 20<sup>th</sup> century, wildcatting oil speculators unsuccessfully drilled for "black gold" in Ocotillo Wells. In the 1930s, movie

moguls sent Hollywood production companies to Ocotillo Wells where they filmed a number of well-known movies. During World War II, the United States Government commandeered portions of the land for military training and a firing range. Surplus Jeeps were among the first recreational vehicles used to explore the park just after the war.



Pumpkin Patch

Ocotillo Wells SVRA was established in 1979. Prior to this, the area was part of the Anza-Borrego Desert State Park. Before the area became a state park, the lands were owned by many different people. Today, there are still over 600 private in-holdings in the park.

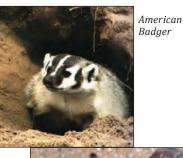
#### **Park Resources**

Ocotillo Wells staff is charged with balancing OHV recreation and protection of the park's truly unique natural, cultural, and geological resources. The desert habitats are very fragile

and take extraordinarily long periods of time to recover. Distinct to the Ocotillo Wells SVRA are its interesting geologic natural wonders and prehistoric and historic features. In addition, in 2008 the SVRA was designated a state "Watchable Wildlife" site. The SVRA is a great place to observe a wide variety of fascinating desert

creatures from jackrabbits and coyotes to desert iguanas and zebra-tailed lizards, from a desert patchnose snake to the classic roadrunner.

The condition and status of the natural and cultural resources in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.





Patch-nosed Snake



Roadrunner

## **Prairie City SVRA**

Prairie City SVRA is an urban OHV park located at the base of the Sierra Nevada foothills approximately 25 miles east of Sacramento and 60 miles west of Lake Tahoe. Flat, open grasslands, rolling hills with native blue oak trees, and acres of cobbled mine tailings span the park providing for an array of OHV recreation opportunities. The SVRA extends more than 1,000 acres and offers OHV enthusiasts a variety of terrain, trails, open riding, and an extensive selection of tracks operated by concessionaires. Park elevations range from 240 to 350 feet above sea level. Summers at the park are dry and hot, while winters tend to have dense fog in the mornings and occasional heavy rains.



Location: Sacramento County Total Park Acreage: 1,047 OHV Recreation Acreage: 644 Year the Park became an SVRA: 1989



#### **Recreational Opportunities**

#### **OHV Recreation**

Prairie City SVRA offers 644 acres of motorized recreation for public use. OHV recreational opportunities include terrain, trails, and tracks for motorcycles, ATVs, 4x4s, RUVs, Karts, and Quarter Midgets. Most of the trails in the park available for motorcycles and ATVs are beginner or intermediate level with a few expert trails.

#### Tracks

In addition to the trails and areas throughout the park, there are also

separate motorcycle

and ATV practice tracks. Privately operated concessionaires provide a number of specialty tracks including the Hangtown Track, a Quarter Midget Track, Kart Track, and Arena Cross TT.





#### Hangtown MX Track

The Hangtown MX Track is operated by a private concessionaire. Just over a mile in length with challenging terrain and high jumps, this track is designed for expert level motocross riders. In the spring, the track is home to the annual Hangtown National Motocross Classic. The first Hangtown race took place in 1969, making it the longest running national series motocross race. It has been held at Prairie City since 1979, and is one of the largest outdoor sporting



events in Sacramento County with more than 25,000 spectators. It is the only outdoor national race still promoted by a nonprofit club, the Dirt Diggers North Motorcycle Club.

# **Special Events**

Prairie City SVRA hosts numerous OHV events each year. Popular events include Hare Scrambles, the Valley Off-Road Racing Association (VORRA) off-road truck and buggy series,



Kart and Quarter Midget races, supermoto competitions, and the annual Hangtown National Motocross Classic.

# **Mountain Biking**

On Wednesday evenings, during the spring and fall, mountain bike enthusiasts can enjoy the park as they practice and test their skills.

# **Education Programs**

Through portable staffed exhibits and special events, Prairie City SVRA's education programs provide an important opportunity to teach kids about responsible OHV use, safety, rider ethics, and awareness and protection of the park's natural and cultural resources. The park also hosts the Off-Road PALs program.

# **Facilities**

# **Day Use and Camping**

The SVRA offers shaded picnic sites, barbecue grills, fire pits, and restrooms in the staging area. Day use parking is provided in the staging area and at designated areas near the various tracks and 4x4 area. There are no camping facilities at the park.





#### **Environmental Training Center**

The Environmental Training Center (ETC) promotes safe and sustainable OHV recreation practices by providing education programming to OHV recreationists on environmental responsibility and safe vehicle operation. The ETC building, which houses a classroom, locker room, and office space, was constructed of recycled materials and uses solar panels to generate 100% of its energy. It also provides charging stations for

electric vehicles. Visitors can see and learn about alternative fuel vehicles including electric motorcycles, electric utility vehicles, and other technological advancements that help reduce the environmental impacts of vehicles.

The ETC rider training area consists of a level dirt riding arena and a 3-acre trail system designed to mimic natural riding conditions. The level training area is used by certified professional trainers to teach new riders about proper riding techniques, while the trail system allows students a place to practice their new skills. The OHV safety training program promotes safe and responsible riding ethics to students, and assists them in minimizing their impact on the environment by emphasizing the importance of staying on the trail and maintaining control of their vehicle.

The landscape in the trail system features examples of six different California ecosystems, including desert, chaparral, oak woodland, conifer forest, sand dunes, and a riparian zone. Participants learn real-world OHV riding techniques and environmentally responsible riding ethics while negotiating varying terrain and natural obstacles similar to that found in some OHV recreation areas.



#### **Park History**

The park lands were originally home to the Valley Nisenan Maidu Native Americans. The Maidu people occupied the eastern portions of the middle and lower Sacramento Valley and Sierra foothills until the discovery of gold and the ensuing Gold Rush.

Prairie City SVRA takes its name from the gold rush mining community that was located just northeast of the present-day park. Today, reminders of that 1850s community can be seen in the acres of cobbled mine tailings left after dredges combed the ancient river beds in search of gold in the late 1800s, and a historical marker just outside the park—California Historical Landmark



Moon Room

#464. After the gold mining days, the area became home to a number of cattle ranches.

In the early 1960s, Aerojet General Corporation purchased the southern portion of what is currently the existing park to build and test rocket engines for the federal government. Today, you can still see both the test rocket launch pit, and the dome-shaped control room called the "Moon Room."

In 1972, Roy and Mary McGill leased 435 acres

of the present park site from Aerojet General Corporation and created a motorcycle riding and competition facility called McGill Off-Highway Vehicle Park. Sacramento County purchased the area in 1975. An additional 401 acres was purchased in 1976, and in July 1988, the park was turned over to the Division.

#### **Park Resources**

Prairie City's terrain varies from flat, open grasslands to rolling hills covered with native blue oak trees. The grasslands attract golden eagles, red-tailed hawks, killdeer, northern harriers, various

songbirds, and many small mammals. Quail, wild turkeys, and woodpeckers shelter under the oaks, deer graze in the area, and occasionally coyotes and bobcats can be spotted.

Selected areas of the SVRA are closed to protect sensitive natural resources. Approximately 180 acres of the park are designated as an ecological reserve to protect the vernal pool habitat



and the fairy shrimp, a federally-listed special

status species. There are also lands surrounding sections of the park which are closed to provide a "buffer" to the neighbors thus reducing possible use conflict and protecting OHV opportunities in the SVRA.

The condition and status of the natural and cultural resources in the SVRA, including a summary of resource monitoring data and restoration work, is discussed under those specifically titled sections within this report. Please refer to those sections for more detailed information.

# Winter Recreation Program

California's Winter Recreation Program is coordinated and administered by the Division in conjunction with the USFS, the California Department of Transportation, and the CHP. Through this collaborative effort, winter recreation opportunities are provided in the mountains throughout Central and Northern California. The Winter Recreation Program has two separate components: the OSV Program and the California SNO-PARKs. Seven of the SNO-PARKs also serve as trailheads for OSVs, such as snowmobiles and other recreational vehicles modified for use on snow.



#### **Over Snow Vehicle Program**

The OSV Program supports a system of 34 trailheads and 26 groomed trail systems providing more than 1,700 miles of motorized opportunity on 11 National Forests. Both the Division and



USFS share in the cost of implementing the OSV Program through Cost Share Agreements (CSA), which provide for trail grooming, plowing of 97 miles of access roads, clearing of snow from parking areas, maintaining restroom facilities, and trash removal.

Support services not included in the CSAs—law enforcement patrols and public education—are funded by the USFS and supplemented through the Division's Grants Program.

OSV Program trails are used each year by an estimated 159,000 OSVs bringing upwards of 200,000 visitors to the trail systems. The OSV Program benefits not only motorized recreation, but also nonmotorized recreational pursuits such as cross-country skiing, dog sledding, and snowshoeing by providing access and staging areas for those activities.



#### **California SNO-PARKs**

Most SNO-PARK sites are located on USFS lands and administered by the Division through an operating agreement between the two agencies. California's 19 SNO-PARK sites provide opportunities for non-motorized winter recreation including sledding, cross-country skiing, and general snow play.

The California SNO-PARKs Program is funded by the sale of SNO-PARK permits. Revenues support services necessary to maintain the SNO-PARKs, including but not limited to plowing of parking lots, maintaining rest-room facilities, trash collection services, signage, and site improvements.



A new SNO-PARK, located within the Stanislaus National Forest along State Route 207, is proposed to open in 2011. Currently

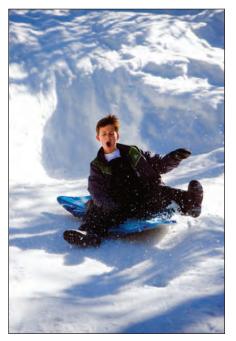


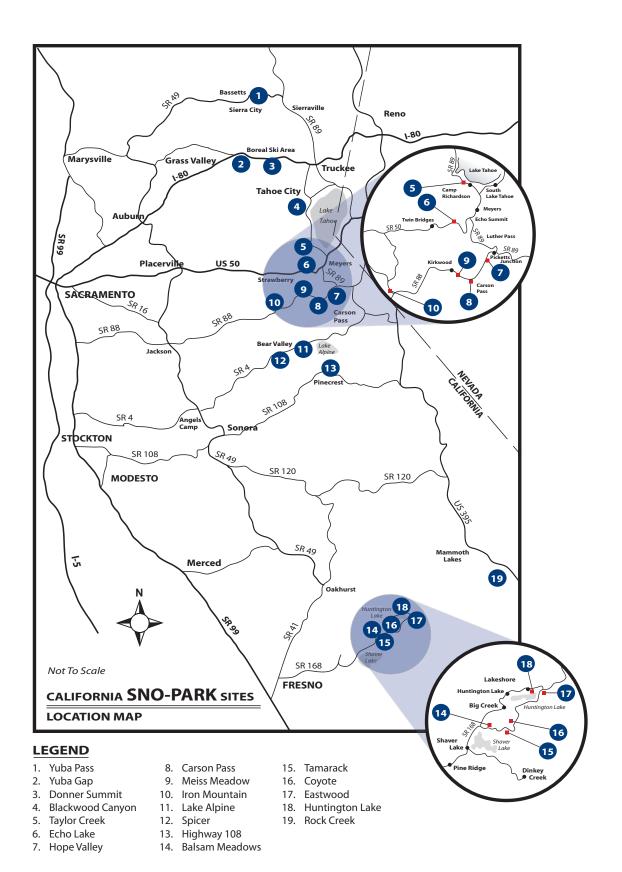
there are three SNO-PARK trailheads in the Stanislaus National Forest. The addition of Round Valley SNO-PARK will help to alleviate the parking congestion that currently poses a safety hazard to those motorized and non-motorized recreationists trying to enjoy the sur-

rounding area. (Additional information is provided on page 146.)

Beginning in December 2010, daily and seasonal SNO-PARK

permits were made available for purchase online. This new online service provides a higher level of customer service and convenience, allowing visitors an easy and efficient way to purchase SNO-PARK permits.





- 2011 Program Report

nterpretation and Educatior

The Division is committed to developing high quality interpretation, education, and hands-on training programs that focus on increasing understanding and appreciation for California's diverse OHV opportunities, natural and cultural resources, and the importance of recreating responsibly.



The Division celebrates and supports public

outreach, interpretation, and education efforts in our SVRAs and with all our partners who have an interest in OHV recreation. The best way to pro-

tect recreational opportunities and the environment is to build understanding in those who recreate on California's public lands so they will recognize the potential impacts of their activities and the importance of recreating safely



and responsibly to preserve opportunities into the future.

The OHMVR Program serves a community with interests which are as varied as the state itself. Cities, counties, BLM, USFS, clubs, organizations, nonprofits,



and educational institutions—those who care about people, the environment, and OHV recreation need to work together to send a consistent message about responsible use.

Education, interpretation, and outreach are accomplished at the SVRAs through various programs, activities, and special events. This includes campfire programs, guided riding tours, desert animal exhibits, 4x4 history tours, and the Junior Ranger Program that promotes safe and



responsible behavior and environmental stewardship. Creating a stewardship ethic of protecting and main-



taining public lands must be made a cultural norm to ensure long-term sustainability for future generations. Dirt bike and ATV safety classes taught by park employees as well as private instructors are available at the SVRAs. The Division also pays the tuition for any youth under 18 years who enrolls in a certified ATV safety training program taught anywhere in the state.



In addition, the Division also sponsors the Off-Road PALs Program. This Program pairs at-risk youth participating in the California



Police Activity League with instructors and equipment (ATVs, motorcycles, and snowmobiles). The Program uses the appeal of OHV recreation as a "gateway activity" to welcome young people into a learning environment which pro-

> motes environmentally responsible and safe recreation. While building an understanding and appreciation of

the outdoors, the Program also instills confidence, develops team-building skills, and fosters positive relationships with law enforcement.

Through these and other outreach efforts the Division is continuing to evolve its education and training programs, placing emphasis on: the

importance of observing rules and regulations associated with operating OHVs safely and responsibly; the importance of preserving, protecting, and respecting the environment; the need to respect private property and closed areas; and the commitment to staving

closed areas; and, the commitment to staying on, and sharing trails.





Handron Training

'olunteers and Nonprofil

S ince the inception of the OHMVR Program 40 years ago, by legislative founders Gene Chappie and Ed Z'berg, volunteers have been an integral part of the Program. The combined effort of these dedicated groups and individuals has resulted in thousands of hours of time given to our parks and public lands. Volunteers have a variety of skills and



abilities that provide essential support—from trail maintenance, and education and interpretation, to working at the special event or in the office—we



couldn't do it without the focused efforts of our volunteers!

Volunteers represent a cross section of those who visit our parks. They bring ideas, views, and approaches which enrich

the SVRA and the resources we protect. Volunteers

contribute to park visitors'

knowledge, encourage interest, and increase enjoyment while assisting with park operations and special projects. They remind us about our mission and what it truly means.



Volunteers are an essential link in the overall operation of State Parks. They provide park visitors information that may not be available from the state, and they interpret park history and features in a manner that is engaging and enjoyable.

The OHMVR Division would like to recognize the concerted efforts of everyone involved in our

Volunteer Program! Your contribution enriches our parks; your spirit energizes us. Without your support, we would not

be able to provide the high quality recreation opportunities that exist today.

Thank you!

# **Grants and Cooperative Agreements Program**

#### **Overview**

In the OHMVR Act, the California Legislature declared that, "...effectively managed areas and adequate facilities for the use of off-highway vehicles and conservation and enforcement are

essential for ecologically balanced recreation." (PRC § 5090.02(b).) Providing financial assistance through the Grants Program is a crucial component of the Division's overall ability to meet the intentions of the Legislature, as expressed in PRC Section 5090.02(c) to: expand and manage existing OHV recreational facilities in a sustainable manner; provide for new OHV recreation areas which are managed to sustain long-term use; and to support both motorized recreation and motorized off-highway access to non-motorized recreation.

Under the Grants Program, the Division makes funding available through grants and cooperative agreements to local, state, and federal entities, Federally Recognized Native American tribes, educational institutions, districts, and nonprofit organizations. Starting with the 2008/09 grant cycle, nonprofit organizations were able to apply for ground operations and restoration projects.



Previously, nonprofit grant applicants were restricted to applications for safety and education projects. The Grants Program allows the state to assist eligible agencies and organizations to manage, develop, maintain, and expand high-quality, sustainable OHV recreation areas and facilities consistent with the legislative intent of the program listed above. With the 2008/09 grant cycle, \$26 million from the OHV Trust Fund were awarded through the Grants Program for operations and maintenance, law enforcement,

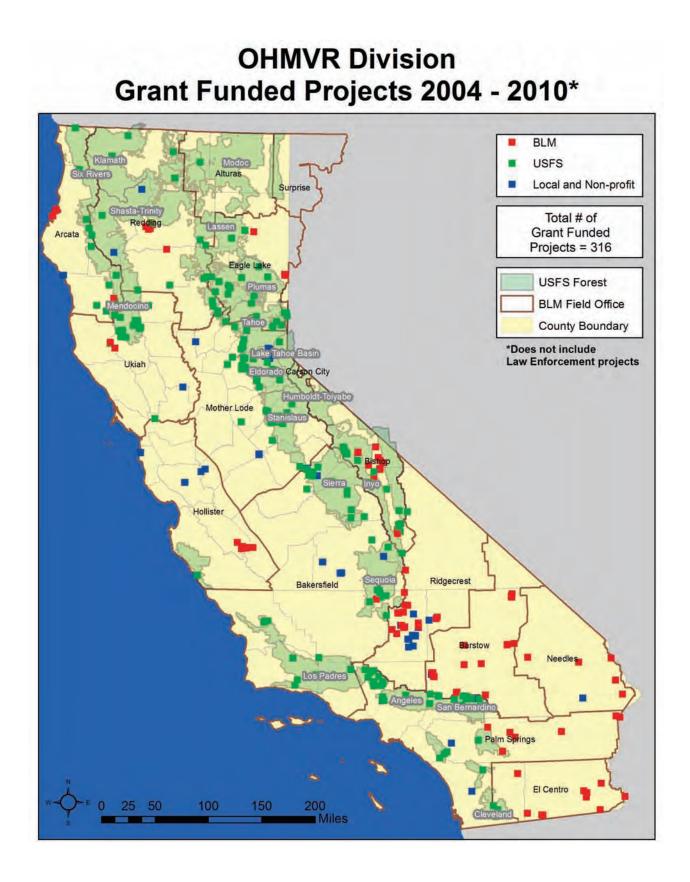
education and safety, and restoration. An additional \$1.1 million were made available for restoration projects funded from the remaining dollars in the Conservation and Enforcement Services

Account (CESA). Per language adopted with the passage of SB 742 in 2008, the additional \$1.1 million may be made available annually until the CESA account is exhausted.

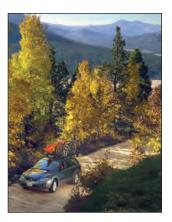
With the exception of law enforcement projects, applicants are awarded funding based on a competitive application process. Law enforcement projects are awarded on a need-based formula. All funds are transferred to the applicant contingent upon Division staff review and monitoring of projects to ensure tasks have been accomplished



AT WORK



in compliance with the Grants Program Regulations. Division staff also works with, and provides technical assistance to, potential applicants to identify appropriate projects for future funding, helps identify solutions to OHV related issues, and provides training to assist with the grant application process. Annual grant workshops are held in Northern and Southern California to assist applicants with new procedures or regulations affecting the Grants Program.



# Legislation

Key changes were made to the Grants Program as a result of the enactment of SB 742 in 2008. One of the most significant changes was the establishment of a set percentage of available grant funding to be allocated to the four categories of activities supported by the Grants Program.

- 50% for Operation and Maintenance: Acquisition, maintenance, operation, planning, development, and/or conservation of trails and facilities associated with OHV recreation and off-highway access to non-motorized recreation.
- 25% for Restoration: Ecological restoration or repair to habitat damaged by either legal or illegal OHV recreation.
- 20% for Law Enforcement: The allocation of funds to local and federal law enforcement entities for personnel and equipment to enforce laws related to OHV use.
- 5% for Education and Safety: Activities that either provide comprehensive education that teach off-highway motor vehicle safety, environmental responsibility, and respect for private property, or provide safety programs associated with OHV recreation.

As a result of the legislative changes to the Grants Program,

the Division comprehensively revised the regulations that govern the Program in accordance with the Administrative Procedures Act administered by the Office of Administrative Law. The current regulations are a product of considerable public participation and input received from government agencies.

Beginning with the 2008/2009 grant cycle, the Division introduced the On-line Grant Application (OLGA) program. OLGA is an interactive database that guides grant appli-

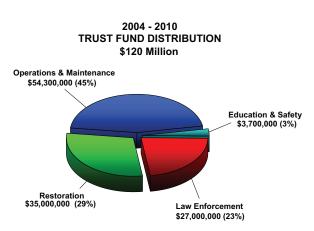


cants through the application process. OLGA allowed the Division to streamline the application process and has been widely praised by the grantees as a more efficient mechanism to apply

for grants. This change has resulted in a far less paper intensive process. Where in past years each compilation of grant requests could include 14,000 pieces of paper (and had to be printed out numerous times for various entities), the process is almost entirely electronic and available through an on-line portal.

Approximately \$350 million has been awarded to grant recipients throughout the state since the Grants Program was first initiated in 1974.

Since 2004, \$120 million from the OHV Trust Fund have been awarded to land management agencies, as well as nonprofit organizations, to acquire, develop, manage, maintain, and sustain OHV recreation opportunities. The 2004-2010 Trust Fund Distribution chart illustrates the amount allocated to the various grant categories.



# Changes to OHMVR Program Benefiting Natural and Cultural Resource Management

As California's population continues to grow, and the number of people choosing to recreate on OHVs increases accordingly, recent changes to the OHMVR Program have increased the Program's effectiveness in meeting this demand and the legislative mandate for resource protection.

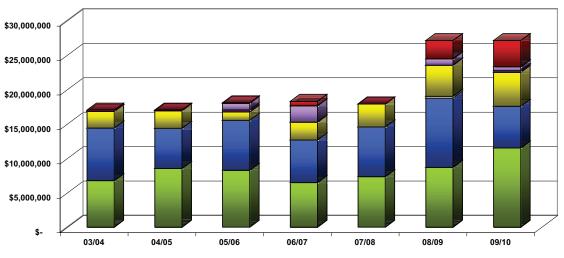
For example, additional funding was made available by the enactment of SB 742 which, among many other changes, increased OHV registration fees from \$25 to \$52 for a two-year registration period resulting in a greater level of Program support. Since 2004, funding available for the Grants Program has increased from \$17 million to \$27.1 million. This increase in funds allows for a far greater level of resource protection by allocating a larger portion of the grant funds specifically for "on-the-ground" work activities such as trail conservation, soil erosion, and habitat monitoring. Additionally, the increase in funds allows for continuous allocation for law enforcement to prevent trespass and operation of OHVs in closed areas, and provides for increased restoration efforts on lands damaged by OHV recreation activities.

# **Changes to Grant Regulations**

Over the past four years, numerous changes have been made to the regulations which govern the Grants Program to promote and encourage a holistic approach to land management practices and maintain the natural resources in good condition. Specifically, the evaluation criteria (the scoring mechanism within the application process) was developed to provide OHV recreational programs that offer a diverse and complete program an opportunity to receive a greater point total. For example, questions asked within the general criteria speak to the quality of the land manager's OHV program. The questions allow the applicant to receive maximum points if their program is broad and diverse.

The grant application and scoring process now looks at both project specific information and general information about the applicant's overall OHV recreation program. Applicants with fully developed OHV recreation programs that include education on responsible OHV recreation, sustainable land management practices, and enforcement efforts are given additional consideration and are more likely to be awarded funding. Examples of questions that directly speak to the applicant's sustainable land management practices include how a land manager incorporates recycled materials in their project, makes use of sustainable technologies in their project, and how a land manager will avoid and/or minimize impact to natural and cultural resources. The more sustainable practices used by the land manager, the higher their score total.

This approach encourages program managers to address all aspects of managing OHV recreation. Funding specific projects has a direct impact on the lands or activities which are funded. Rewarding applicants for applying a holistic approach to their OHV recreation program provides positive indirect impacts to areas and activities not directly funded by the OHV program.



#### 2003-2010 Grants Funding by Fiscal Year



|                 | 03/04            |    | 04/05      |    | 05/06      |    | 06/07      |    | 07/08      |    | 08/09      |    | 09/10      |  |
|-----------------|------------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|--|
| USFS            | \$<br>6,755,000  | \$ | 8,508,000  | \$ | 8,257,000  | \$ | 6,478,000  | \$ | 7,322,000  | \$ | 8,682,000  | \$ | 11,489,000 |  |
| BLM             | \$<br>7,616,000  | \$ | 5,828,000  | \$ | 7,244,000  | \$ | 6,172,000  | \$ | 7,216,000  | \$ | 10,052,000 | \$ | 6,057,000  |  |
| Other Fed       | \$<br>-          | \$ | -          | \$ | -          | \$ | -          | \$ | -          | \$ | 271,000    | \$ | -          |  |
| Local           | \$<br>2,448,000  | \$ | 2,586,000  | \$ | 1,216,000  | \$ | 2,614,000  | \$ | 3,352,000  | \$ | 4,512,000  | \$ | 4,958,000  |  |
| Districts       | \$<br>-          | \$ | -          | \$ | 309,000    | \$ | -          | \$ | -          | \$ | -          | \$ | 213,000    |  |
| Unallocated     | \$<br>-          | \$ | -          | \$ | 951,000    | \$ | 2,368,000  | \$ | -          | \$ | 921,000    | \$ | 571,000    |  |
| NonProfits      | \$<br>181,000    | \$ | 78,000     | \$ | 80,000     | \$ | 638,000    | \$ | -          | \$ | 2,662,000  | \$ | 3,812,000  |  |
| Total Available | \$<br>17,000,000 | \$ | 17,000,000 | \$ | 18,057,000 | \$ | 18,270,000 | \$ | 17,890,000 | \$ | 27,100,000 | \$ | 27,100,000 |  |

# Addition of Grant and Audit Staff

The increase in grant funding, from \$17 million in 2004 to \$27.1 million in 2008, has resulted in a greater number of funded projects. Three grant administrator and auditor positions were added to cover the increased workload associated with this increased funding.



Grant administrators review project proposals and score applications. During this review, environmental staff assists the grant administrators to ensure that Wildlife Habitat Protection Plans (WHPP), Soil Standard and Guidelines, and CEQA are included in projects as required by statute.

Additionally, after funding is approved, grant administrators routinely review projects to determine progress toward completion, review implementation of Habitat Management

Plans (HMPs) and

Soil Conservation Plans, and verify requirements contained in the project agreement are met. These reviews may include: desk reviews, questionnaires and site visits, and other means consistent with Grants Program Regulations.

Statute requires a minimum of 20% of completed projects be selected for performance audits. Audits consist of both



financial reviews to ensure funds were

spent and accounted for appropriately. If irregularities are discovered, grantees are required to correct any deficiencies or, as a last resort, to refund the OHV Trust Fund. Grantees in subsequent grant cycles receive additional points if 100% of their deliverables in previous grant projects were completed.



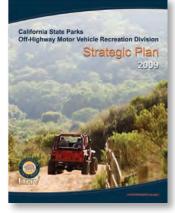
# **REPORT REQUIREMENT NO. 1**

The results of the strategic planning process completed pursuant to subdivision (1) of Section 5090.32.

# **OHMVR Division Strategic Plan**

In 2008, the Division began the process of developing a shared vision with the Commission, and developing a Strategic Plan to achieve that vision. Based on a series of meetings with the Commission Subcommittee and the public, a Vision Statement was created and approved by the Commission.

Through an extensive process that included internal staff workshops and public meetings, the Division conducted a comprehensive assessment of external and internal factors that affect the OHMVR Program. Based on the information gleaned during this process, the Division developed strategic planning goals and objectives.



Public review meetings, workshops, and focus group meetings were conducted to develop the draft that was submitted to the Commission for review and comment. After incorporating changes based on the Commission's comments and Commission meetings, as well as com-

ments from the public, the Strategic Plan was completed and submitted in the fall of 2009 to the

# **VISION STATEMENT**

The OHMVR Division will assure ongoing access to a wide variety of high quality OHV recreational opportunities through our commitment to prudent resource management, outdoor recreation, community education, and environmental stewardship. Governor and DOF for approval.

The Strategic Plan provides a road map for the Division and is based on four strategic themes and five guiding principles. Based on these strategic themes and guiding principles, the Strategic Plan adopts a framework of six goals for the OHMVR Program to meet its legislative mandates.

For each of the goals listed below, the Strategic Plan lays out specific objectives to be implemented to achieve the goal. The objectives include anticipated timeframes for completion, and also describe performance measures

which can be tracked to verify objectives have been accomplished. Finally, resource assumptions are included for each objective which indicates whether additional resources will be needed to achieve the objective.

# **GOAL 1 - Sustain Existing Opportunity:**

Protect, preserve, and enhance existing OHV opportunities in a manner that ensures well managed, interesting, and high quality experiences, and address the environmental impacts that may be associated with those activities.

#### GOAL 2 - Increase OHV Opportunity:

Add new OHV opportunities where appropriate and needed to replace loss of existing opportunities and respond to changing and future demand.

#### **GOAL 3 - Staff Development:**

Enhance the abilities of Program managers and staff dedicated to the development, management, and implementation of the OHMVR Program.

#### GOAL 4 - Develop an Informed and Educated Community:

Achieve a highly informed and educated community associated with OHV recreational activities, dedicated to safe and lawful OHV operation and responsible environmental stewardship.

#### **GOAL 5 - Cooperative Relationships:**

Establish and maintain productive relationships between individuals, organizations, industry, and government agencies to cooperatively identify problems and develop and implement solutions to advance the Mission and Goals of the OHMVR Program.

#### **GOAL 6 - Informed Decision Making:**

Improve the quality, quantity, and accessibility of information needed to support sound decision making, transparency of administration, and communication with the interrelated groups interested in, and associated with, the OHMVR Program.

#### **STRATEGIC THEMES**

- Emphasize the Basics
- ✓ The Greening of OHV Recreation
- Improving Technology
- The New Gateway

#### **GUIDING PRINCIPLES**

- ✓ Sustainability
- ✓ Transparency in Decision Making
- ✓ Working with Partners and Volunteers
- Considering the Needs and Concerns of Stakeholders
- ✓ Sound Data for Management Decision Making

Thanks to the hard work of the SVRAs and dedicated staff, the Division has made significant progress toward achieving the Goals and Objectives that will help the Division fulfill its Program mission and realize its Strategic Plan vision. The Division's progress toward achieving a number of the Strategic Plan's Goals is outlined below.

# **GOAL 1 OBJECTIVES:**

1.1 On an annual basis, ensure requirements for the Soil Standard and Habitat Protection Programs (HPP) are being implemented in the SVRAs and for other projects supported by OHV Trust Funds.

# **Objectives Realized:**

- Monitoring programs have been employed to ensure requirements for the Soil Standard and HPP are being implemented. Examples of monitoring programs include quarterly photopoint monitoring, trail condition assessments, and the development of trail watch volunteer programs to report on trail conditions.
- University of California at Davis (UCD) completed a Peer Review of the Division's Habitat Monitoring System (HMS) which provided insight as well as recommendations for improvements. The Division has initiated a process to develop an improved Phase 2 HMS.

# 1.2 By 2012, identify and implement best management practices (BMPs) for keeping SVRAs, and other lands supported by OHV Trust Funds, compliant with current regulations and standards in resource management to reduce environmental impacts.

# **Objectives Realized:**

 SVRAs have begun implementing the BMPs as recommended in the OHV BMP Manual for Erosion and Sediment Control (Salix 2007) for maintenance and construction practices at the parks.

# 1.3 Using the 2009/2010 fiscal year as a baseline, achieve a 25% reduction in carbon footprint from management of the SVRAs by 2020.

# **Objectives Realized:**

 Installation of photovoltaic solar panels on two buildings at Prairie City SVRA has saved more than 120,000 pounds of atmospheric carbon.

# **GOAL 2 OBJECTIVES:**

2.3 By 2012, develop five new OHV recreational opportunities in response to growing recreation trends and equipment (rock crawlers, endurocross, electric, etc.).

#### **Objectives Realized:**

- Hollister Hills SVRA recently added an Adventure Trail course.
- Ocotillo Wells SVRA opened a dedicated ATV Training Area.

## **GOAL 3 OBJECTIVES:**

## 3.2 By 2011, develop opportunities for Division staff to participate in diverse work assignments throughout the Division and with other agencies.

#### **Objectives Realized:**

- Various SVRA law enforcement staff participated in a targeted enforcement effort on the Rubicon Trail during the summer of 2010.
- Several staff members are currently participating in various training and development assignments, working in other classifications for purposes of skill development and expanded knowledge of park operations.

## 3.5 By 2013, assure increased accountability for expenditures of the OHV Trust Fund through Division resources.

#### **Objectives Realized:**

The Division has developed databases and applications to track expenditures for the Grants and Cooperative Agreements Program and for dollars spent outside of the Division within state parks.

# 3.6 By 2010, increase the availability of training opportunities designed to enhance knowledge of laws and regulations related to OHV operation.

#### **Objectives Realized:**

- Staff has participated in comprehensive training on rulemaking procedures, including development of regulations and how regulations are adopted.
- Division law enforcement staff conducted 10 OHV law enforcement classes for 154 officers from 12 Sheriff's Offices, 8 Forests, 5 BLM areas and 2 Police Departments.

## **GOAL 4 OBJECTIVES:**

4.1 By 2010, the Division will convene an OHV Education Stakeholder Group to advise the Division in the development of a successful statewide educational program regarding responsible OHV use. By 2011, the Division will develop and begin implementing the educational program.

#### **Objectives Realized:**

The Commission, in partnership with the Division, has initiated first steps in establishing the OHV Education Stakeholder Group. Development of a comprehensive Education Program is ongoing.

#### 4.3 By 2012, increase availability of training classes addressing OHV safety and environmental stewardship at SVRAs and grant-funded areas.

#### **Objectives Realized:**

Several of the SVRAs have expanded their ATV safety training programs including training a number of employees as ASI instructors, and increasing the number of ATV Safety Certificate training classes offered at the parks. For example, Hungry Valley SVRA introduced a Junior Range Program on Labor Day weekend 2010. Sixty children participated in the program.

### **GOAL 5 OBJECTIVES:**

5.2 By 2011, improve communication, coordination and integration between agencies and stakeholders to focus on collective efforts to achieve consensus in addressing identified issues.

#### **Objectives Realized:**

Division law enforcement staff collaborated with El Dorado County Sheriffs Department, the Eldorado USFS, and the CHP in developing and implementing a program of enhanced OHV law enforcement efforts on the Rubicon Trail during the summer of 2010.

#### 5.3 By 2014, improve and increase public involvement at the SVRAs.

#### **Objectives Realized:**

- The Division has made significant strides in its outreach efforts including expanding education, interpretation, and outreach programs at its SVRAs. These efforts have increased public knowledge and involvement at the SVRAs. In addition, staff collaborates with school groups to conduct interpretation programs and is active and present at various community events, trade shows, and OHV related activities. (This item also fulfills Goal 5, Objective 5.4)
- Several SVRAs have increased the number of volunteers at their parks. For instance, Hollister Hills SVRA has doubled the number of volunteers in the last two years and is on course to have 12,000 hours of volunteer work completed for 2010. (This item also fulfills Goal 5, Objective 5.4)

Prairie City SVRA hosted its first annual Visitor Appreciation Day in October 2010. This special event highlighted the many recreational opportunities available at the SVRA. Nine OHV clubs and 16 OHV dealers participated in the event. SVRA staff provided a variety of interpretation and education programs highlighting the park's resources and raising awareness of responsible OHV recreation. The event also facilitated a stronger working relationship with OHV dealers, clubs, volunteers, and Prairie City SVRA staff. Approximately 425 visitors attended the event.

# 5.4 On an annual basis, perform activities that enhance the public's understanding of the OHMVR Program's goals and objectives

- In 2010, Oceano Dunes SVRA conducted 27 campfire programs; 636 people attended the educational programs. These programs help park visitors learn the history of local recreation and to value the natural and cultural resources of the park.
- In 2010, Carnegie SVRA began working with Livermore public schools, presenting programs on Carnegie history and a local animals life science program to over 300 school children, teaching them the importance Carnegie SVRA places on the conservation and protection of park resources.
- In 2010, Hungry Valley SVRA set up an interpretive station within the park, providing activities and crafts for children, and general information about the park for all visitors. This outreach program is available weekly and serves approximately 45 to 65 visitors each week.
- During the 2009-2010 season, Ocotillo Wells SVRA conducted 338 interpretive programs to over 53,000 visitors. The SVRA's wide variety of programs provided visitors with information about the park's resources, responsible recreation practices, as well as park rules and regulations. In addition, new interpretive facilities including a Discovery Center, a one-third mile ADA walkway, and an amphitheater were constructed.

## **GOAL 6 OBJECTIVES:**

#### 6.2 By 2016, identify and obtain data needed to fill information gaps.

#### **Objectives Realized:**

The Division contracted with California State University Sacramento (CSUS) during the 2009-2010 winter seasons to conduct a visitor survey at 11 trailheads to obtain accurate baseline information on winter recreation trail use.

## **REPORT REQUIREMENT NO. 2**

The condition of natural and cultural resources of areas and trails receiving state off-highway motor vehicle funds and the resolution of conflicts of use in those areas and trails.

Protecting natural and cultural resources is essential to ensure OHV recreation areas are managed to sustain long-term use. Overall, the condition of natural and cultural resources being managed through financial contributions from the OHMVR Program have benefited from the Program. Recent improvements will further enhance conditions. With improved ongoing efforts, the OHMVR Program will continue its essential mission to provide well-managed OHV recreation, protect lands, maintain habitat, and repair damage caused by both legal and unauthorized OHV recreation.

## Soil Conservation Standard

Prior to 2009, trails and facility management at the SVRAs and certain grant applications (all cooperative agreements other than law enforcement and all acquisition and development projects) were subject to the 1991 Soil Conservation Guidelines and Standard (1991 Soil Standard). The 1991 Soil Standard required OHV areas and trails to be maintained in a condition that allowed for feasible rehabilitation by resource managers. The 1991 Soil Standard also required use of an erosion hazard rating system specifically designed for OHV assessment purposes, and a monitoring system whereby all portions of a given site were mapped and designated green, yellow, or red.



Trail and erosion reviews were previously conducted at the SVRAs guided by the 1991 Soil Standard, using the erosion hazard rating system. The soils expert would compare notes with



the environmental scientist, who was focusing on overall habitat health. The result would be taken to the Park Superintendent for consideration and budgeting. Due to staffing and workload, this occurred at most parks on a biennial basis. Periodic summary reports were prepared and shared with District and Division middle management to keep all aware of progress or long-term issues and trends. The 1991 Soil Standard was also incorporated into the Grants Program. Grant applications were reviewed for compliance with the 1991 Soil Standard, including reporting via the erosion hazard rating system. In a collaborative effort to support implementation of the 1991 Soil Standard, in 2004 and 2005, experts from the California Department of Conservation (DOC), California Geological Survey (CGS), conducted in-depth field reviews of a variety of federal sites that had received grant funds. The reviews identified existing and potential erosion and soil instability concerns and



provided recommendations to address those concerns. The reviews also provided important information about implementation of the 1991 Soil Standard that supported the update of that standard, which had just commenced.

Since implementation of the 1991 Soil Standard, the structure of OHV use in California has changed dramatically. The number of OHV registrations and the variety of OHV equipment available to enthusiasts has increased in recent years simultaneously with a decline in acreage available for OHV recreation. To ensure soil conservation protocols have kept up with these trends and are implemented effectively in areas affected by OHV activities, Assembly Bill (AB)



2666 (2004) required that the 1991 Soil Standard be updated. (PRC § 5090.35 (b)(1).) Starting in 2004, the Division brought together a number of other agencies and specialists, including the DOC, the California Department of Forestry and Fire Protection, BLM, USFS, the U.S. Natural Resources Conservation Service, and the U.S. Geological Survey, to assist in developing a new soil standard. The Division also sought, through a series of public workshops, input from representatives of other government organizations, OHV recreation groups, OHV industry consultants,

and environmental communities. The collective effort produced the 2008 Soil Conservation Standard.<sup>44</sup>

The 2008 Soil Conservation Standard was incorporated into the 2008 Grants Program Regulations. (California Code of Regulations (CCR) § 4970.06.3.) Beginning with the 2008/09 grants cycle, applicants submitting projects involving ground disturbing activities are required to develop a Soil Conservation Plan, which details soil monitoring and conservation practices for those projects. Soil Conservation Plans must contain protocols for assessment and maintenance

in project areas, and protocols for monitoring to ensure functionality of the project to allow for sustainability within the natural setting.

At the conclusion of the project performance period, the grantee is required to provide a Monitoring and Soil Conservation Standard Compliance Report (Compliance Report) to the Division. The Compliance Report must demonstrate the applicant has sufficient knowledge of the project area to plan and implement activities that will result in sustainable practices and compliance with the 2008 Soil Conservation Standard. The Compliance Report also requires the grantee address (1) historical conditions, (2) change analysis, (3) findings, (4) conclusions, and (5) a compliance action plan describing activities to be implemented and a schedule of those activities.

If a land manager determines the 2008 Soil Conservation Standard is not being met in any project area, the Compliance Action Plan must describe the steps taken to temporarily close and repair the area (or portion thereof) in order to meet the 2008 Soil Conservation Standard.

Division staff is tasked with ensuring adherence to the 2008 Soil Conservation Standard. Final reimbursement to the grantee depends on the grantee providing full documentation to the Division with regard to the Compliance Report. Grant administrators conduct a final meeting to verify information included in the report. Soil Conservation Plans prepared under the 2008 Soil Conservation Standard were first prepared and submitted with the 2008/09 grant applications. The first reporting of monitoring results under these new plans will occur with grant applications submitted in 2011.

The 2008 Soil Conservation Standard is also implemented in the SVRAs. The Division trains trail crews at the SVRAs to follow the guidelines and requirements of the Soil Conservation



Standard. Trail crews monitor and assess trail conditions using the most up-to-date technology including LiDAR (Light Detection and Ranging) data surveys, Geographic Information System (GIS) databases, and GPS units. The data collected may be employed to track a variety of trail condition variables used to enhance trail maintenance. Some of the data collected throughout the year and following significant weather events include trail use, photo monitoring, and trail condition ratings. The information taken from the trail data is used to anticipate future issues before they lead to excessive resource damage. The data collected also allow trail crew coordinators to prepare trail maintenance plans to maintain conditions that meet the 2008 Soil Conservation Standard. Any trail segment that is likely to exceed restorability or is adversely affecting resources is addressed appropriately for public safety and resource protection. This proactive approach reduces long-term maintenance costs and reduces environmental impact, thus helping to achieve the requirement of sustainable OHV recreation.

### **Condition of Natural Resources in SVRAs**

The Division directly manages eight SVRAs. Below is a brief description of the condition of natural resources in these areas.

#### **Carnegie SVRA – Natural Resources**

Located in the coastal hills of western San Joaquin and eastern Alameda counties, the topography of Carnegie SVRA is steep, with several vegetation communities represented, including California annual grassland, blue oak, California sagebrush-black sage, and mule fat. The climate is Mediterranean with cool, wet winters and hot, dry summers.

The park currently owns approximately 5,000 acres. Of that acreage, approximately 1,200 acres are currently managed as part of the OHV use area; the remainder is awaiting the preparation of a General Plan which will establish the management policies and the appropriate levels of recreation balanced against the protection and conservation of natural and cultural resources.



Valley Oak

The existing public use area is divided by use type; open riding and designated trails only. Approximately half of the park on the north side, which typically consists of areas that are grasslands with more durable clay soils, is "open riding." Although these clay soils have been ridden on for several decades, years of observations and monitoring show few signs of erosion or degradation. The other half, the south side, is the "trails only" area, which comprises the more sensitive habitats of the park (coastal

scrub and oak woodland). The soils in these habitats are less stable and need vegetation to

minimize erosion from storm water, while the vegetation, once disturbed, can take years to reestablish. These two designations were established in the park's General Plan (1981). Orange carsonite markers installed in 2004 clearly delineate the boundary between the two use areas, informing visitors when they cross from one riding zone into the other.

The current health of the ecosystem is good, as measured by amphibian presence and bird species richness. New interim HMS protocols were implemented in 2010 based upon recommendations made in the initial UCD HMS Study which were a significant improvement over the old



protocols. This will provide a more complete and comprehensive measurement of ecosystem health.

The park is home to the federally-listed threatened California red-legged frog and California tiger salamander. Because of the presence of these listed species, along with the need to clean out sediment basins annually, several permits are in place, issued by both state and federal agencies starting in 2005.



Red-legged Frog

The park also maintains an industrial storm water permit from the Central Valley Regional Water Quality Control Board (RWQCB) for the Tesla mining district at the upstream end of the park. In compliance with the requirements of this permit, the park began the process of installing temporary erosion and sediment control measures, and initiating BMPs (e.g., silt fence, rock bag



Screech Owl

check dams, and culvert replacement), aimed at decreasing stormwater runoff and improving water quality. Twice each year, the runoff from the site is analyzed for sediment, oil, grease, and total organic carbon. The results thus far are inconclusive, and more samples will be needed in order to reach conclusions with any level of confidence. Although anecdotal, the visual inspections have indicated these measures do reduce the amount of sediment in the stormwater. For example, at the end of the 2009-2010 season the three-foot-tall silt fence (sediment capturing measure)

had retained only one foot of sediment, significantly less than in previous years. Each year, park staff evaluates, records, and submits this data to the RWQCB. Permanent BMPs and erosion control measures are being established using data from previous efforts.

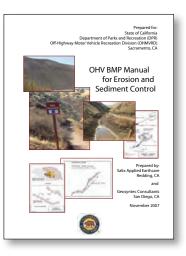


In 2004-2007, a watershed analysis (Corral Hollow Watershed Assessment – June 2007) was conducted by Salix Applied



Indian Paintbrush

Earthcare and Geosyntec Consultants for all the state parcels owned within the Corral Hollow Creek watershed, a seasonal drainage running along the northern park boundary. The watershed analysis assessed the park's water quality and identified potential problem areas and proposed small and large-scale solutions. This comprehensive study has provided the background needed to plan future improvement projects (e.g., road and trail maintenance and realignment and restoration of Corral Hollow Creek) and has focused management efforts on locating and improving specific problems within the park. As an example, the primary trails, which are also the emergency access roads, were divided into several sections based on shared physical characteristics. Each section was evaluated based on grade, existing drainage, erosion potential, delivery potential, and an estimate of past soil loss. This evaluation resulted in a prescription for maintenance activities along each segment, as well as a priority rating. While some of the recommendations were implemented during the annual maintenance activities, the majority will be executed as a major capital outlay project (currently in the planning phase). Salix Applied Earthcare and



Geosyntec Consultants also developed a BMP Manual for OHV recreation areas as part of their contract (OHV BMP Manual for Erosion and Sediment Control – November 2007).

In conjunction with these projects, staff has implemented an intensive sign program to better assist visitors with understanding where they can and cannot recreate, as well as providing information about sustaining a healthy habitat and water quality. These projects continue to improve OHV recreation opportunities by developing better managed trail systems and, at the same time, ensuring sustainability of park lands and resources through the new BMPs. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 154.)

#### **Clay Pit SVRA – Natural Resources**

Clay Pit SVRA is surrounded by the Oroville Municipal Airport, ranch lands, and a CDFG shooting range and wildlife area. The bowl-shaped topography has largely been created by past excavation of clay minerals used in the construction of the Oroville Dam, and dredge tailings from gold mining remain, primarily in the southeastern corner of the park. A shallow canal partially bisects the northern one-third of the park. The northern, upstream end of the canal is fed by a very small, seasonal drainage that originates outside the park to the north, draining part of the adjacent airport and surrounding uplands.



Habitat diversity is limited within the park, although seasonally wet areas cover as much as 15% of the total acreage. Most of the park consists of upland areas that experience dry, hot conditions during the summer and early fall. Vegetation within the park consists of three distinct plant communities. Upland locations, which are non-wetland areas, are vegetated with low growing grasses. Lowland locations consist mostly of wetland vegetation associated with vernal pool



Western Meadowlark

habitat, and a few areas consist of other wetland vegetation such as spikerush. Fremont cottonwoods are also found scattered throughout the park, offering areas of shade for park visitors in the summer months.

Wetland delineations were completed in 2005<sup>4</sup> and 2008<sup>5</sup> and provided classification of the existing vegetation. Together the two delineations identified almost 200 separate wetlands, including vernal pools. These delineations of the vernal pools identified various aquatic flowering plants and biota, including the federally-listed threatened vernal pool fairy shrimp. Additionally, a sensitive plant species survey<sup>6</sup> was completed in 2005. Bird surveys were completed in 1999 and 2000.

Many vernal pool features throughout the SVRA have been heavily impacted by soil disturbance, either from OHV use or historic mining activities. The OHV activity creates rills and shallow

depressions in which ponding occurs, giving rise to hydrophytic (aquatic) vegetation. The hydrophytic vegetation is in a continual state of disturbance and re-establishment from OHV activities.

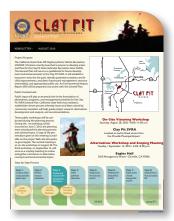
The greatest challenge facing Clay Pit SVRA is the ability to develop recreational opportunities while protecting and enhancing the existing vernal pool habitat. Although the park unit is quite small—approximately



Vernal Pools

220 acres—and does not draw a large number of visitors each year, the construction of new facilities could increase park visitation numbers.

Although the site currently provides very little structured recreation, the local OHV community enjoys the park unit for its open riding and hill climbing features. Over the last few years, park staff has worked with the park visitors to assess their needs and determine what facilities might be beneficial. Most of the facilities requested, such as tracks and staging areas, could be constructed in upland areas, which would help lessen impacts to the vernal pools. A park General Plan is currently under development and will provide strategies and alternatives for development and restoration activities, along with guidance from regulatory agencies such as the U.S. Fish and Wildlife Service (USFWS), CDFG, Army Corps of Engineers, and the RWQCB.



Hydrology and run-on drainage issues from adjacent lands are problematic as the property receives a good deal of stormwater run-on and can flood from waters of the Feather River. A hydrology study currently underway will assess site conditions including non-point source pollution, sediment generation, and general hydrological conditions to assist staff in develop-



ing adaptive stormwater management actions. The results of this survey will be available in 2011. Preliminary results are not yet available. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 158.)

#### Hollister Hills SVRA – Natural Resources

Located just an hour's drive from San Jose, Hollister Hills SVRA is situated in the Gabilan Mountains at elevations from 660 feet to 2,425 feet. Adobe and granitic soils are present, predominantly separated by the San Andreas Fault that runs through the park. Topography on the property ranges from the foothills to mountain ridgeline.

Vegetation communities consist of annual grassland, conifer forest, pine woodland, riparian-oak woodland, and high and low chaparral neighbored by agricultural areas. Common wildlife in the park include black-tailed deer, coyotes, bobcats, mountain lions, ground squirrels, bats, red-tailed hawks, western meadowlarks, wild turkeys, western fence lizards, and gopher snakes.

Hollister Hills integrates natural features into effective strategies that help address the concerns of nearby community members and landowners. For example, the two primary by-products of OHV use



Gabilan "hawk"

that affect the park's neighbors are noise and fugitive dust levels. The Hollister Hills trail design team has incorporated the land's natural contours in designing trails to limit the effect of OHV sound on neighboring properties.<sup>7</sup> Another example is the adobe soil areas in the park. These soils are high in clay content which minimizes erosion and reduces airborne dust. This resistance to erosion, coupled with appropriate trail design, helps ensure clean water quality and trail sustainability. Reduction of dust promotes good neighbor relations. Trails that exist in other types of soil are constructed away from neighbors and require additional erosion control features.

In 2008, Hollister Hills opened the Hudner and Renz properties. The trails were designed on land which had previously been surveyed for sensitive plants and animals thus reducing the impacts to the habitat. To protect the California tiger salamander, certain trails were seasonally closed during the breeding season. In addition, the land's natural contours were used to channel sounds way from neighboring properties and to site the trails in areas that would minimize the impacts of dust



and sound. Trails were located in areas where surveys indicated the presence of soil types resistant to erosion. The end result yielded increased OHV opportunity and contributed to the goal of minimizing the impact of OHV recreation on the natural resources.

Hollister Hills SVRA continuously seeks to foster partnerships and takes a collaborative approach to address issues and develop methods that sustain OHV recreation. For example, in 2009 park staff created a new internship program in partnership with West Valley College, San Jose State University, and Fresno State University. The internships last between 10 and 14 weeks. Since the program's inception, three interns have been through the program and were subsequently hired into the Environmental Management Program at the District. Interns have the opportunity to work in a variety of program areas at the SVRA, including resource management, interpretation, maintenance and operations, and public safety.



Black-tailed Deer

Through the course of their internships, each student gains exposure to, and develops an understanding and working knowledge of, the actual operations of Hollister Hills SVRA. Additionally, the interns assist with photo archiving of native plants found in the park, GIS mapping, and developing visitor surveys. Each intern completes a project or develops a program related to public education and/or natural resources.

This internship program helps increase resource awareness of the dynamic park programs at Hollister Hills by reaching out beyond the traditional OHV community for ideas, support, and education. It enhances the career opportunities for local students and provides Hollister Hills with high quality interns who are ready to work at the park, or in other resource management or recreational settings.



Red-legged Frog

Hollister Hills SVRA has a five-year Memorandum of Understanding (MOU) with California State



Golden Eagle

University at Monterey Bay (CSUMB) to facilitate the use of interns to help monitor and collect water samples for input on watershed management.

Invasive exotic plants are a growing problem for Hollister Hills SVRA, as they are throughout California. Hollister Hills has had a program to manage invasive plants for many years. Staffing changes and short-ages have occasionally led to periods when park staff were unable to fully implement program goals. This inconsistent approach has resulted in limited success in eradicating invasive species. Some prescribed burns, grazing, and biological treatments were implemented, but lacked

coordinated efforts. However, plans are now in place to modernize the management program for controlling invasive species. For example, yellow starthistle is the greatest threat to the park's natural resources and is an increasing problem for the entire state. Some estimates suggest that

over 10 million acres of California are currently infested by this exotic, approximately 10% of the total surface area of the state.<sup>8</sup> The primary focus of the park's current weed management program is to eradicate this and other exotic species by depleting the seed banks and/or the root system of the plants. The program involves mowing and grazing of infected fields before the plants go to seed. If the program is maintained for several years, the seed banks are exhausted and the plants will start to die off.



Swallowtail Butterfly

The timing of these programs must be precise and consistent because if the plants are allowed to go to seed then the whole program must be reset.

A critical tool for successfully controlling invasive plants is the gathering of accurate and continuous data. Park staff recently purchased GIS/GPS equipment and software and will create a



weed database that will be used to monitor exotic plants within the park. The data will then be used to determine the best control methods for each population. Mowing, grazing, herbicide application, and prescribed burns are all methods that park staff will implement to eliminate or control the spread of exotics within the park.

Hollister Hills SVRA has partnered with the San Benito County Weed Management Area (SBCWMA) in the eradication of noxious plants. SBCWMA was created as a partnership between private and public land managers

with the intent of stopping the introduction and expansion of invasive weeds in the County. Invasive plants do not respect property lines or jurisdictions, therefore in order to effectively manage these invasive species in the park, staff must work effectively with neighbors to develop and implement control measures. This partnership allows park staff to share resources and knowledge with other agencies such as BLM, the County Agriculture Commissioner, and the National Park Service.

Staff works with SBCWMA to develop outreach programs, including a brochure given to land managers, cattle ranchers, and farmers throughout the region, to increase awareness and knowledge of the damaging effects invasive plants can cause. Staff has partnered with SBCWMA to sponsor and host booths at fairs, symposiums, and workshops for local land managers. This outreach has been successful in increasing public understanding regarding the harmful effects of invasive plants.



Mountain Lion

Feral pigs are another species introduced to California that have established populations throughout the state. Pig behavior is extremely disruptive and damaging to native habitats. Pigs are large animals that have no sweat glands, so they cool off by wallowing in mud. They also forage for food by digging. Both of these activities can destroy vegetation and disturb sensitive wetland and riparian habitat. At Hollister Hills SVRA, pigs cause the greatest impact and





Bird Creek

disturbance to habitat areas which are home to the federallylisted threatened California red-legged frog and California tiger salamander. To protect the park's resources, a feral pig reduction program has been established, and pigs within the park are trapped and killed in an effort to reduce their numbers and consequently their impacts. While scientific data is still being gathered, staff notes an improvement of habitat throughout the park as a result of the reduction of pigs.

The park's proximity to urban areas and its high visibility require the implementation of several management approaches as part of daily operations. They include nonmotorized open space areas, which have been established both in and around the park, continuous monitoring of dust and sound levels that originate within the park, and a 15-year grazing program, which primarily utilizes the buffer areas of

the Renz property. Approximately 1,300 acres in the park are grazed. This multi-use program

helps reduce fuel loads and therefore aids in fire prevention and also aids in weed management in grassland areas.

The program is in compliance with state and federal guidelines that regulate ambient air quality standards. The real time data collected will be used to actively monitor dust levels within the park. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 159.)



#### Hungry Valley SVRA – Natural Resources

Hungry Valley SVRA is located next to Interstate 5 on the Tejon Pass in the intersection of the Transverse, Tehachapi, and Coastal ranges of Southern California. The park is bordered on the

north by Tejon Ranch, on the west by Los Padres National Forest, on the east by the CDWR, and on the south by the Angeles National Forest. Hungry Valley contains four distinct physiographic units. The first is Hungry Valley proper, a large valley in the western portion of the park. The second is Freeman Canyon, a badland-type environment (an area characterized by extensive natural erosion) in the middle of the unit. The third is the Gorman Creek drainage along the



Oak Woodland Natural Preserve, 600 year old Valley Oak tree

north and east sides of the park. The fourth is Canada de Los Alamos, a large, relatively flat plane in the southern portion of the park with a deep canyon cutting through the area supporting riparian vegetation.

Vegetation within the park is diverse due to the convergence of several California floristic regions. Major vegetation communities include chaparral, pinon-juniper woodland, grassland, riparian woodland, juniper shrubland, oak woodland, and mixed shrubland. The 60-acre Oak Woodland Natural Preserve in the northwest area of Hungry Valley SVRA protects a natural seep that provides water for immense valley oaks with an understory of native grasses. This is an extremely rare and unique habitat, and is therefore closed to motorized recreation.

During the formation of the Hungry Valley SVRA, ecologists from the California State Parks recognized a unique six square mile area along the northern boundary of the park which



Black Bear enjoying watering pond

contained the native valley grassland plant community. A management plan,<sup>9</sup> formulated in 1981, recommended that the entire 4,200 acres be set aside as the "Hungry Valley Native Grasslands Management Area" (NGMA). Vehicular recreation is still allowed in this area; however vehicles are required to stay on clearly identified trails established by park staff to protect this sensitive plant community.

An extensive vegetation and wildlife monitoring program was created for Hungry Valley in 1997. At that time, a



Spring wildflower bloom in the north grassland area

vegetation and wildlife survey was conducted by the Soil Ecology and Restoration Group from San Diego State University (SDSU).<sup>10</sup> Specific monitoring protocols were established by SDSU in collaboration with the Division HMS team. These protocols were used during this survey to gather data on vegetation and wildlife at randomly selected monitoring plots throughout the SVRA. OHV plots within each habitat type were paired with control plots in non-OHV areas. That same year the HMS<sup>11</sup> was completed by the Division. This document

used the SDSU protocols to establish biotic inventory and monitoring methods and also set up data analysis and interpretation guidelines to determine long-term effects of OHV recreation on the habitats of Hungry Valley as well as the other SVRAs.

During this same period of time, Hungry Valley began building and training its resource protection staff. Comprised of environmental scientists, vegetation managers, erosion and trail professionals, this staff has the responsibility to monitor and assess the habitats and trail conditions of the entire SVRA. They also aggressively implement protection measures as needed.



Through 14 years of extensive and consistent habitat, wildlife, and soil monitoring at Hungry Valley SVRA, the following conclusions have been drawn by the District senior environmental scientist.

Out of 20,000 total acres, approximately 15,000 acres of Hungry Valley SVRA are managed as trail areas with a low density of trails per acre. The analysis of the habitat monitoring data shows the diversity, density, and distribution of species has not significantly changed in these areas. OHV recreation is not substantially affecting the habitats, soils, or wildlife in the trail areas. These



areas of Hungry Valley SVRA are in a sustainable equilibrium between the impacts of the OHV recreation and the protection and restoration of the natural and cultural resources.

Approximately 1,000 acres of Hungry Valley SVRA are closed to OHV recreation and are managed as natural or cultural preserves. These areas are in pristine natural condition and have little or no recreational impacts.

Large mammal monitoring site

Approximately 4,000 acres of Hungry Valley SVRA are designated and managed as "open riding." Within this zone is a 2,000 acre area designated as "open camping." These areas are more heavily impacted by OHV recreation. In an effort to balance these impacts and make the



California Poppies and Lupine

recreational use in these areas sustainable, management has taken several actions. Three major steep slope restoration projects have been completed in these areas, restoring over 500 acres of native habitat and significantly controlling erosion. Designated campgrounds have been improved and expanded; also a new group camping area has been created. These actions will enable management to curtail open camping and reduce the impact of recreational activities in these areas.

Hungry Valley SVRA accommodates approximately 250,000 recreational visitors each year. Recreation management policies including visitor service functions (e.g., law enforcement, interpretation, and signage) and various resource programs, provide significant protection for natural and cultural resources. The Hungry Valley SVRA vegetation program not only monitors and restores vegetation throughout the park, but has an active invasive species control program. The invasive species are



mapped annually to determine the size of the infestations. SVRA staff are currently controlling



the spread of seven invasive species within a 2,000 acre area.

Hungry Valley SVRA is home to 236 plant species, 113 bird species, 38 mammal species, and 25 herptile species. Taking into consideration the overall

good condition of the habitats found in the park<sup>27</sup> and the suite of species found in these habitats, it is clear that Hungry Valley SVRA sustains a healthy and diverse species

composition. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 163.)



#### **Oceano Dunes SVRA – Natural Resources**

Oceano Dunes SVRA lies at the north end of the Guadalupe-Nipomo Dunes complex, an approximately 20,000-acre coastal dune and dune scrub ecosystem that stretches for 18 miles

along the central coast. Habitats within the park include coastal foredune, dune scrub, bare sand sheets, dune slack wetlands, coastal estuary, riparian, and freshwater lakes. The SVRA provides habitat for numerous special-status plant and animal species, including valuable nesting habitat for state- and federally-listed endangered California least terns and federally-listed threatened western snowy plover.

Of the 3,600 acres within the SVRA, approximately 2,100 acres are managed as native habitat, some of which is open to non-motorized



Beach Evening Primrose



Lizard tracks

recreation (hiking,

nature viewing, beach activities, and similar non-motorized activities). Oso Flaco Lake and the associated habitats are among the park's most important biological features. The lake is one of the few remaining freshwater dune lakes in central and southern California, providing important waterfowl habitat and supporting a thriving avian community. The lake is also home to the Gambell's watercress and the marsh sandwort, two endangered plant species that are so restricted they occur naturally in just two locations in the world. Numerous other areas discussed below provide regionally important habitat, including the dune system south of Oso Flaco Lake and the vegetated islands located within the motorized recreation and camping area. Approximately 1,500 acres of the SVRA are open to vehicles and camping. During the western snowy plover nesting

season, March 1 - October 1, approximately 50 acres of non-motorized recreation area north of

Oso Flaco Creek and approximately 250 acres of motorized recreation area north of the creek are closed to all public access.

Staff undertakes substantial monitoring activities throughout Oceano Dunes SVRA to track the health of habitats and wildlife. Considerable effort is placed on understanding the status and trends of key state- and federally-listed species like the western snowy plover and California least tern. Staff



California Least Tern

also conducts surveys for listed plant species, tidewater goby, and steelhead trout. Staff conducts routine HMS surveys that focus on vegetation, shore birds, terrestrial birds, water birds, small mammals, large mammals, and herpetological resources.

Based upon the past five years of managing Oceano Dune's natural resources, observing conditions on the ground, reviewing data, and consulting with other land managers and resource experts, environmental scientists identified invasive exotic vegetation and water quality as the two most significant issues that threaten the health and viability of habitats and wildlife populations at Oceano Dunes SVRA.

#### Invasive Exotic Vegetation

The single greatest threat to habitat viability is the spread of invasive exotic vegetation throughout the Guadalupe-Nipomo Dunes Complex. Two invasive exotic grasses (veldt grass and European



European beachgrass

beachgrass) are widespread and impact habitats throughout the SVRA. Both species were deliberately introduced into the dunes complex. European beachgrass, for example, has been documented on Oceano Dunes from over a century ago. These two weeds aggressively displace native plant species in foredune, dune scrub, and dune swale habitats. These invasive grasses are widespread throughout the Guadalupe-Nipomo Dunes Complex. On some adjacent properties, they have completely displaced native dune scrub. Park staff has been working with partner agencies

and adjacent public landowners, including the Land Conservancy of San Luis Obispo County, the Guadalupe-Nipomo Dunes National Wildlife Refuge, Santa Barbara County, and private

landowners, to control large infestations of invasive exotic species throughout the dune complex. The most significant effort to control invasive exotic species is approximately 160 acres in the south Oso Flaco dunes. This large area has been treated annually for two years to control the spread of European beachgrass. Weed control activities include herbicide application, hand removal of target weeds, and prescribed fire. Long-term results of this effort are not yet available.

#### Water Quality and Quantity

The second greatest threat to habitats and species in the SVRA is a combination of water quality and quantity issues resulting from actions that occur outside the park. Oceano Dunes SVRA includes Oso



Lizard tracks

Flaco Lake and Arroyo Grande Creek, two significant water bodies associated with the Guadalupe Nipomo Dune Complex. Water quality has been identified as a significant issue in Oso Flaco Lake. The lake drains a small watershed that is dominated by irrigated agriculture. Monitoring by the Central Coast RWQCB had demonstrated significant issues with bacteria levels, nutrient levels, and pesticides. In 2010, park management posted an advisory at Oso Flaco Lake warning people not to consume fish from the lake due to pesticides found in fish tissue.<sup>12</sup> The lake is listed



Oso Flaco Lake Boardwalk

as an impaired water body by the Central Coast RWQCB and is subject to a Total Maximum Daily Load regulation dealing with a host of water quality impairments.

The park contracted with the Coastal San Luis Resource Conservation District to monitor water quality in the lake paying particular emphasis on turbidity, sediment loading, and nutrient loading. The multi-year effort complements the water quality monitoring being conducted by the Central Coast RWQCB and local agricultural interests in the Oso Flaco watershed. Additionally, Oceano Dunes staff is involved in reviewing and commenting on pending regulations that can help improve water quality.



In Arroyo Grande Creek, water quantity issues originating upstream of the park have become problematic. The park manages a small section of Arroyo Grande Creek, including the estuary, and is becoming more involved in watershed management issues in Arroyo Grande Creek to help bring focus to water supply issues in downstream sections of the creek. There were two instances in 2008 and 2009 when the estuary completely dried up resulting in fish kills, including documented loss of steelhead trout and suspected loss of tidewater goby, two federally-listed species. The park has been conducting quarterly fisheries surveys of Arroyo Grande Creek and was able to document these fish kills and the population responses of native fish species. Upstream water use and groundwater extraction likely plays a major role in causing the low water conditions in the creek, but formal data on the causes are not available at this time.

Lupine

While the habitats and wildlife populations face challenges, as discussed above, the overall condition of natural resources remains in a stable state, thanks in part to ongoing management

activities. Invasive exotic weed populations are being actively treated to maintain the integrity of habitats, active restoration projects are helping protect habitats within the SVRA, and endangered species populations are stable or increasing within the SVRA.

#### Vegetated Islands

Vegetated islands, which are fenced off areas of vegetation, are protected throughout the 1,500 acres open to riding and camping. These vegetated islands require maintenance to maintain the habitat in the face of shifting sand. The effort involves both maintaining the fencing itself, ensuring it has not been undermined or overtopped by shifting sands, and periodically moving the fences to ensure adequate protection of expanding vegetation. Additionally, each year Oceano Dunes SVRA environmental scientists implement a large restoration project



Dune Scrub Vegetation Restoration

designed to stabilize the vegetated islands that could otherwise be overwhelmed by the migration of the active sand dunes. Since 2004, Oceano Dunes SVRA has restored approximately 140 acres of actively shifting sand dune.

In 2007 and 2008, the CGS prepared a study on options to perpetuate the habitat values (e.g., special-status species habitat, native dune scrub vegetation) of the vegetated islands within Oceano Dunes SVRA. These recommendations will eventually be incorporated into a long-term vegetated islands management plan. Data reported in the CGS study found that between 1985 and 2003 the total acreage of vegetation increased from 142.4 acres to 222.9 acres.<sup>13</sup>

#### Western Snowy Plover and Least Tern Nesting Program

Each year, from March 1 through September 30, the park closes off approximately 300 acres of Oceano Dunes SVRA to provide for nesting habitat for western snowy plovers and California



least terns. These species nest on open sand habitats and have experienced threats from, among other things, recreational activities and predators. A large complement of environmental scientists and seasonal staff (15 permanent and seasonal staff members) monitors this nesting area on a daily basis to track nesting activity, predator activity, nest success, and chick survival. Chicks are banded to allow tracking of individual birds or broods through to fledge age

Western Snowy Plover

and beyond. This banding program allows park managers to gain important information about breeding populations of plovers and terns that rival other breeding sites on the west coast. This program has gathered important information on breeding activity, factors influencing breeding success, factors influencing chick survival, and changes in adult breeding populations. Thanks to these monitoring and management activities, staff has been able to document stable and growing trends in breeding bird populations and chick survival.



Improving habitat to encourage nesting

Oceano Dunes SVRA environmental scientists take an adaptive management approach to the task of managing habitats and species in the park. Management activities are adjusted as new information becomes available. For example, approximately 250 acres of riding and camping area that are closed during the breeding season for plover and tern nesting and chick rearing become degraded as vegetation, topography, and other natural dune features such as beach wrack are disturbed due to OHV recreation during the winter months (October -

February). To mitigate the impacts to breeding habitat, park staff implements a number of habitat enhancement activities designed to improve breeding and chick rearing conditions for these species. Activities include the addition of large woody debris to provide for topography and wind protection. Additionally, spreading wood chips to provide debris patches where the birds can successfully nest. This enhancement program is reviewed and adjusted annually. As a result of

this adaptive management approach, park staff has been successful in maintaining a strong breeding population of western snowy plovers and California least terns at Oceano Dunes SVRA.

To formalize the ongoing species program, Oceano Dunes SVRA has been working on a Multi Species Habitat Conservation Plan (HCP) to cover all park operations under the State and Federal Endangered Species Acts. This HCP will outline specific management and



Western Snowy Plover

monitoring activities to address covered species, including western snowy plover, California least tern, California red-legged frog, tidewater goby, and numerous listed plant species. The draft HCP is expected to be available for public review in 2011.<sup>14</sup> (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 166.)

#### **Ocotillo Wells SVRA and Heber Dunes SVRA - Natural Resources**

Ocotillo Wells SVRA is located in the Colorado Desert approximately 90 miles northeast of San Diego in both Imperial and San Diego Counties. Originally 14,590 acres were purchased in 1975 and 1976 and classified as an SVRA in April 1976. The eastern 28,300 acres were purchased

in 1986. Subsequent acquisitions include an additional 10,000 acres to the north and, eventually, 30,000 acres to the east. Currently the District consists of approximately 85,000 acres, including property managed under an MOU with the BLM.

A General Plan/EIR process has recently been initiated that will analyze and address the management setting, since Ocotillo Wells SVRA has grown almost six-fold in size since it was originally established over 30 years ago. The new





Desert Sunflower

plan will re-examine existing management protocols for adequacy and appropriateness given the expanded size, as well as current conditions and usage patterns in the park. A new General Plan/ EIR is also underway for Heber Dunes SVRA, owned by the County until 2007.

Ocotillo Wells SVRA receives over one million visitors a year. There is no controlled access entrance to the park. Both Ocotillo

Wells and Heber Dunes are managed

primarily as open riding areas, although some areas in Ocotillo Wells are managed as trail areas. Areas of significant environmental or cultural value are closed to all vehicular use. As is common in desert land management areas, camping is allowed on an open basis in Ocotillo Wells SVRA. Heber Dunes is available for day use only; overnight camping is not permitted. There are five main camping areas in Ocotillo Wells with shade ramadas, picnic tables, trash bins, and restroom facilities. Water



Cactus Wren



Cholla

is not available at any of these sites.

Habitats in Ocotillo Wells include mesquite, ironwood, desert willow, smoketree, and Palo Verde woodlands, four-winged saltbush scrub, Creosote-burro-bush scrub, desert buckwheat, ocotillo, brittle-bush scrub, galleta grass-indigo scrub, goldenbush, sunflower barrens, and woody aster badland wash benches. In 2009, Ocotillo Wells began developing a dedicated trail team which has begun inventorying and collecting data on the existing trails throughout Ocotillo Wells and Heber Dunes. In addition, the team recently has completed the inventory and signage of all the official trails on the Ocotillo Wells map. The trail team completed a Soil Conservation Plan in 2010 and will be monitoring and maintaining these trails.

A particularly challenging area of the park is the eastern section. This area is owned by BLM and State Parks and is managed by Ocotillo Wells SVRA. Evidence of user created trails in this area has increased and in some cases is extensive. In this area the trail team is focusing on completion of trail assessments, installation of trail signage, and performance of trail maintenance and repair.



Ocotillo Wells SVRA Badlands

A complement to the trail team, and a great benefit for the natural and cultural resources programs, has been the development of the GIS group. GIS data layers have been compiled for each resource survey, trail team, maintenance project, interpretive panel and programs, and special event route. Every sign in the park is contained in the inventory. The system has LiDAR and imagery to 6" resolution for the entire District.

An added benefit to the GIS technology is in the processing of special event applications. Data provided by the resources team and captured in GIS layers improves the efficiency of the special event permitting process. Data captured in the system will help park staff determine if proposed activities and routes of travel avoid sensitive areas, and what restrictions may be necessary to ensure the activity complies with park management guidelines pertaining to sustainable recreation. Currently the park has five preapproved routes that have been evaluated in the GIS system and reviewed with specialists for feasibility.

Based on habitat monitoring and assessment, in general, natural resources appear to be degrading at both units. Some sampled habitats have sustained substantial loss of vegetation, soil, and



general habitat integrity. The park's senior environmental scientist noted OHV recreation may be causing a lack of plant recruitment and loss of annual seedbank, conditions he observed to be particularly apparent in areas of intense motorized use. He suggested establishing designated, maintained routes as the best strategy to respond to this generalized impact. The General Plan will evaluate this issue and recommend appropriate corrective management strategies.

Monitoring of vertebrate elements of both parks has yet to produce analyzable results. The reptile survey has been revised to produce more meaningful data, but the bird and mammal data will require many more years to reach a statistically analyzable value.

The flat-tailed horned lizard, which is a CDFG species of special concern, occurs in various habitats throughout the SVRA. The Ocotillo Wells District has been funding studies since 1991 to determine the species' population, density, hibernation factors, and life history. Much new information has come from these annual studies. In the last three seasons a valuable and



Flat-tailed Horned Lizard

useful protocol for flat-tailed horned lizard monitoring has been implemented. While a useful statistical analysis is still several years away, staff environmental scientists are confident this system will provide meaningful data on the relative condition of the population of this species. Development of protocols for the Colorado fringe-toed lizard is pending. The condition of other special-status animal species is largely unknown at this time and will require further investigations.



In June 1997 California State Parks signed a Flattailed Horned Lizard Management Strategy Plan that established Ocotillo Wells SVRA as a Research Area for this species. This Strategy Plan is an Arizona – California Conservation Agreement. As signatories of this plan, Ocotillo Wells District funds annual studies to monitor and gain more information about the species.

Tamarisk plants (*Tamarix ramosissima* and *T. aphylla*) are located in many of the washes through-

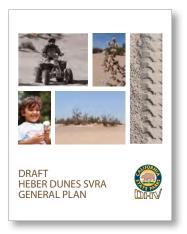
out both Ocotillo Wells SVRA and Heber Dunes SVRA. *Tamarix ramosissima* (salt cedar) is a frequent and invasive large shrub to small tree in major washes and numerous tributaries in Ocotillo Wells SVRA and along the boundaries of Heber Dunes SVRA.

Since 1988 the Ocotillo Wells District has been reducing the tamarisk population at Ocotillo Wells SVRA through cutting, spraying, and removal. Tamarisk trees have been removed from Tule, Bank, San Felipe, Tarantula, and Alluvial washes. Arroyo Salado has a large tamarisk community. Future plans are to continue with the removal of tamarisk throughout the park. Yearly inspections for re-sprouts are done at



past removal locations. At Heber Dunes SVRA, presence of tamarisk species has been recognized as valuable for shade, wind, and dust control reasons; associated management questions are being considered in the Heber Dunes SVRA General Plan/EIR.

Russian thistle (tumbleweed) is found mainly in sandy depressions in the mudhills habitat throughout Ocotillo Wells SVRA and is likely fully naturalized at this point. It does not normally reach the growth stage required for "tumbling" but does spread by seed.



Mustard is found throughout Ocotillo Wells SVRA especially in disturbed areas and appears to spread along vehicle courses, especially

from the two major highways but in the interior as well. The Sahara mustard species has accel-



erated and spread dramatically the last two rainy seasons. The only safe and effective strategy for removal is mechanical using hand tools. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 169.)

#### **Prairie City SVRA – Natural Resources**

Located at the foot of the Sierra Nevada foothills, Prairie City SVRA provides undulating terrain with elevations ranging from 240 - 350 feet. The lands within the SVRA were previously used for

a variety of activities such as grazing, gold dredge mining, and aerospace and industrial test sites. Similar activities (aerospace and industrial testing) continue today on adjacent lands. Topography on the property ranges from nearly level in the western sections of the property that are generally characterized by old dredge tailings, to gently sloping and steep hills with scattered remnants of blue oak woodlands in the east. Within the eastern portion of the property, a number of branches of, or tributaries to, Coyote Creek are found. The most common wildlife in the park include black-



tailed deer, coyotes, bobcats, striped skunks, California ground squirrels, black-tailed jackrabbits,



wild turkeys, and red-tailed hawks. The park is also home to approximately 180 acres of vernal pools and wetlands.

Vegetative communities consist of annual grassland, blue oak woodland, chaparral, and Fremont cottonwood riparian areas, although approximately 60% of the site is comprised of exposed soil absent vegetation. These barren areas are mostly due to extensive vehicular use. Certain areas are protected from such high OHV use, such as the stand of blue oaks located in the southeastern portion of the park and the vernal pools located to the north. The oaks are protected from OHV activity by fencing that surrounds large stands of trees, while still allowing a network of trails.

Prairie City SVRA is balancing protection of mature native oaks, permanent water sources, and erodible soils with the maintenance of acreage available for OHV use. The park provides open riding opportunities, trails, tracks, other designated facilities, and special events, all within a limited amount of acreage in which to recreate. This park is one of the smaller SVRAs, and the condensed use presents a challenge to simultaneously improve conditions for both resources and OHV recreation. The protection tools that work the best are often those that incorporate a "recreation" component by combining recreational opportunity with resource protection, such as hardened crossings. Recreation



components also include use of natural obstacles and barriers (e.g., tree trunks, rocks, and topography), which provide protection of waterways and vegetation by blocking unwanted OHV access in certain areas while also providing clearly delineated obstacles and riding opportunities



Red-tail Hawk

that take the rider through the sensitive area with little or no impact to the resources.

Sediment basins are cleaned out annually or as needed. The park completed a major redesign of the existing sediment basin system in 2009. The basins were redesigned to be shallower and include baffling to slow the water, which allows the suspended sediment particles to drop out of suspension. Each sediment basin has been outfitted with a gravity feed skimmer

that drains the top few inches of water, containing the least amount of sediment, and pipes it to the next sediment pond, where the cycle repeats. At the end of the process, the goal is to have improved the sediment retention time and have clean water leaving the property, which will now be monitored annually using a recently acquired turbidity meter.

To minimize sources of sediment, several hardened crossings made of large rocks were also installed. These designated crossings allow riding in a perpendicular direction across the creek, but not within the creek bottom.

Rotational hill climbs were started in 2005 and are reworked and rotated every one to two years. The designated hill climb area is approximately 2.5 acres. A rotational hill climb is intended to provide a fun recreational area without generating excess sediment. When one side of the hill needs to be reworked, the other side is opened to riders, thus ensuring they always have an area that will challenge them while reducing the amount of soil loss. The area is reworked with the soils from the sediment basins, which ensures the park continues to use native soils.





The park supports and sustains two habitats designated as critical by the USFWS—elderberry trees and vernal pools. Annual species surveys have revealed and confirmed the presence of several special-status species, including the federally-listed threatened valley elderberry longhorn beetle and vernal pool fairy shrimp, the state-listed threatened Swainson's hawk, and two California species of special concern, the western spadefoot toad and the western pond turtle. Past wildlife surveys have helped establish the



locations of these special-status species and their habitats leading to implementation of protection measures, such as fencing, trail reroutes, and seasonal closures.

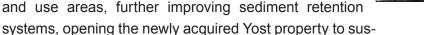
For example, vernal pool protective measures were completed in 1999, including enclosure fencing and an interpretive panel providing visitors with information on the ecological importance and sensitivity of vernal pools.

Elderberry shrubs are found mostly along the main park

road and have grown to such great size that they present a serious safety concern in restricting motorists' vision and causing traffic to swerve into the on-coming lane to avoid hitting the low

hanging branches, seasonally laden with berries. Park staff is working with USFWS to determine how best to maintain the health of the shrubs while ensuring safe passage along the roadway. In addition, park projects, such as the recent construction of the ETC, incorporated the elderberry shrubs within the design of the trail system and completely avoided removal of any plants.

Future resource protection projects will likely include reducing erosion by continued rotation of hill climbs and use areas, further improving sediment retention





Elderberry

tainable use, enhancing the grassland habitat, improving control of exotic species, and possibly establishing a visitor carrying capacity. (Additional information is provided in Report Requirement No. 4 Summary of Resource Monitoring Data Compiled and Restoration Work Completed on page 173.)

## **Condition of Cultural Resources in SVRAs**

#### Status, Conditions, Monitoring, and Resolution of Conflicts

PRC Section 5024 mandates that all state agencies that manage cultural resources must evaluate the significance of those resources. In recent years, the Division has reinforced its commitment to the development, enhancement, and awareness of its Cultural Resources Program. The Division hired its first state archaeologist in 2000, and then augmented its Program with the hiring of additional archaeologists between 2007-2010. Division archaeologists have been very successful in bringing the Division up-to-date in its cultural inventories (Table 1), and developing cultural resource plans and strategies that include proactive measures to ensure the SVRAs' cultural resources are inventoried, evaluated, monitored, and protected. To enhance their efforts, Division archaeologists actively participate in Department-wide cultural training, working in compliance with state mandates, developing an efficient Cultural Resource Program that effectively manages, protects, and preserves cultural resources for many generations to come.

| SVRA                 | Previously<br>Inventoried | Current<br>Date | Authors                                                     |  |
|----------------------|---------------------------|-----------------|-------------------------------------------------------------|--|
| Carnegie SVRA        | 1980                      | 2010            | Kelly, McAleer, and Hines(1980);<br>ASC: Newland et al.     |  |
| Clay Pit SVRA        |                           | 2009            | Perez and Long                                              |  |
| Heber Dunes SVRA     | Acquired in 2007          | 2009            | EDAW AECOM: Jordan and<br>Bowden-Renna                      |  |
| Hollister Hills SVRA | 1979                      | 2010            | Hines and Porter(1979);<br>Long (2010)                      |  |
| Hungry Valley SVRA   | 1980                      | 2012*           | Kelly, Hines and Luberski (1980);<br>Perez and Long (2012*) |  |
| Oceano Dunes SVRA    | 2005                      | 2010            | Hines and Gruver (2005);<br>Perez (2010)                    |  |
| Ocotillo Wells SVRA  | 2002                      | 2012*           | Hines et. al (2002); Mealey,<br>Kress, and Parker (2013)*   |  |
| Prairie City SVRA    | 1989                      | 2010            | Derr (1989);<br>Perez and Long (2010)                       |  |

## Table 1. Previous Available Cultural Resource Inventories (includes before 2004)

\* Anticipated completion date

As a state agency, the Division complies with state laws and regulations, and at times, the Division assists federal agencies in their compliance with federal laws.<sup>15</sup> "Cultural resources" is the common term used to describe and encompass a variety of landscapes, artifacts, features, buildings, structures, and sites among a multitude of other resources connected to California's prehistoric and/or historic past. Common cultural themes include significant American architecture, engineering, sciences, economics, agriculture, education, society, politics, military, and culture.



Bowl Mortar and Pestles

The objectives of this cultural resources section of the 2011 OHMVR Commission Program Report are to summarize the cultural resource information compiled from cultural resource inventories, reports, monitoring, and site stewardship programs; address the condition of cultural resources of areas and trails in the SVRAs; and, to resolve the conflicts of use in those areas.

#### **Cultural Resource Inventories and Reports**

Cultural resource inventories in the SVRAs are a critical tool for the Division to identify, monitor, and manage the resources. PRC Section 5024.1(g) states:

If the survey is five or more years old at the time of its nomination for inclusion in the California Registry, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource. (PRC § 4024.1(g).)

PRC Section 5024.1(g) is the impetus for a department policy that requires an adequate survey of all known cultural resources within lands they manage that is no more than five years old. Furthermore, an inventory is also completed when new land is acquired. (PRC § 5097.2.)

Maintaining current and accurate Cultural Resource Inventory Reports for each SVRA is essential to properly manage and protect park resources. Having an up-to-date cultural resource inventory of each SVRA allows for the archaeologist to determine which areas of the park contain, or may contain, resources. This information is the foundation for decision making related to: the level of protection or mitigation requirements when considering a Division project; opportunities for the interpretation of cultural resources; and, which resources require annual monitoring for adequate preservation and management.



Bedrock Mortar, Hollister Hills SVRA

Maintaining current Cultural Resource Inventory Reports for each SVRA fulfills the following:

- Provides a current list of all known cultural resources managed by the Division
- Provides protection and preservation measures of cultural resources owned and managed by the Division

- Aids in future planning and development projects proposed for the SVRA which are contingent on the cultural resource findings, along with protection and preservation measures listed in the report
- Expedites project review processes by providing up-to-date knowledge of the location of cultural resources, along with protection and preservation measures
- Complies with the Division's legal requirements

Conducting cultural resource inventories require significant research and preparation prior to conducting field work, field reviews, and post field review. This includes, but is not limited to, the following measures.

## Pre-field Research

Pre-field research serves to examine all archaeological, ethnographical, and historical studies associated with the project area and surrounding vicinity, and fulfills the following:

- Identifies previously recorded cultural resources within the park
- Provides background information for identifying new resources during fieldwork
- Provides background information that will be synthesized into the final Cultural Resources Inventory Report
- Determines if additional research needs to be conducted

Additional pre-field tasks include:

- Examination of current site records and literature
- Consultation with local Native California tribes
- Contact with local historical societies
- Creation of project GIS maps

#### Field Survey

Upon completion of the pre-field preparation and research, a team of archaeologists conducts an on-the-ground pedestrian field survey of the SVRA. During this field survey, resources are recorded and the cultural resources GIS database for the SVRA is updated.



Hungry Valley SVRA

#### Preparation of a Cultural Resources Inventory Report

A Cultural Resources Inventory Report is compiled using the information gathered from the prefield research, as well as the results of the fieldwork, all site records, detailed maps, and preliminary evaluations of the cultural resources eligible for listing on the California Register of Historical Resources (California Register) or the National Register of Historic Places (National Register). Cultural resources determined eligible for listing on the California Register are termed historical resources; those eligible for listing on the National Register are called historic properties.

If historic-era buildings, structures, objects and/or landscapes are present at an SVRA, a qualified State Historian must update the site record and conduct an evaluation of eligibility for the Registers, which is also included in the final report. The final Cultural Resource Inventory Report is submitted to the Division, the SVRA District Superintendent, the local California Historical Resource Information System Center, and the Archaeology, History & Museums Division.

Table 2 illustrates the type and number of resources located at the SVRAs. These resources are actively protected and studied by archaeologists from the Division, as well as other Divisions within California State Parks, and universities throughout the state.<sup>16</sup>

| SVRA                  | Archaeological<br>Sites | Historic<br>Structures<br>(Standing) | Cultural<br>Preserves* |  |  |
|-----------------------|-------------------------|--------------------------------------|------------------------|--|--|
| Carnegie SVRA         | 6                       | 7                                    | 0                      |  |  |
| Clay Pit SVRA         | 1                       | 0                                    | 0                      |  |  |
| Heber Dunes SVRA      | 1                       | 0                                    | 0                      |  |  |
| Hollister Hills SVRA  | 67                      | 7                                    | 0                      |  |  |
| Hungry Valley SVRA    | 99                      | 41                                   | 3                      |  |  |
| Oceano Dunes SVRA     | 70                      | 0                                    | 0                      |  |  |
| Ocotillo Wells SVRA   | 1270                    | 1                                    | 1                      |  |  |
| Prairie City SVRA     | 7                       | 2                                    | 0                      |  |  |
| OHMVR Division Totals | 1521                    | 58                                   | 4                      |  |  |

#### Table 2. Known Cultural Resources Managed by the OHMVR Division

\* Note: PRC Section 5090.43 states: After January 1, 1988, no new cultural or natural preserves or state wildernesses shall be established with SVRAs. To protect natural and cultural values, sensitive areas within SVRAs may be designated by the Division if the Commission holds a public hearing and makes a recommendation therefore. These sensitive areas shall be managed by the Division in accordance with PRC Sections 5019.71 and 5019.74 which define the purpose and management of natural and cultural preserves.

#### **Evaluating the Significance of Cultural Resources**

Following the completion of a cultural resources inventory, Division archaeologists evaluate the significance of the resources to determine the level of monitoring required.

In order for a cultural resource to be considered significant, it must meet all of the following:17

- ✓ It must meet one of the criteria list for significance with regard to either the California Register or the National Register of Historic Places
- ✓ It must be 50 years old, or posses exceptional importance
- ✓ It must retain integrity

Generally, a resource shall be considered significant if the resource meets the criteria for listing on the California Register (PRC § 5024.1, and, CCR, Title 14, § 4852) including the following:

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record, and



Tesla Bedrock Mortars, Carnegie SVRA

- 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- 2. Is associated with the lives of persons important in our past
- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- 4. Has yielded, or may be likely to yield, information important in prehistory or history

The criteria for evaluation of cultural resources for significance under the National Register criteria is very similar to those for the California Register and are found in Title 36 Code of Federal Regulations (CFR) Part 60.4:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of significant persons in or past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded or may be likely to yield, information important in history or prehistory.

A significant cultural resource must meet at least one of the criteria above for either the California or National Register, must typically be at least 50 years old, and must possess integrity. Integrity is defined as "the ability of a property to convey its significance" (National Park Service 2002). The cultural resource must convey a sense of time and place and must possess several of the seven aspects of integrity to do this (National Park Service 2002). The seven aspects of integrity are: setting, location, materials, design, workmanship, feeling, and association.



Surveying at Hollister Hills SVRA

Cultural resources determined eligible for listing on the National Register are automatically listed on the California Register.

#### Monitoring of Cultural Resources

Consistent cultural resource monitoring of those resources determined to be significant is important due to the fragile, non-renewable, and irreplaceable nature of the park's resources. Once damaged, their unique value to California's and/or our Nation's heritage is lost forever.

Division archaeologists monitor significant resources using Archaeological Site Condition Assessment Reports (ASCAR). Damage to cultural resources occurs from intentional destruction (e.g., construction projects, prescribed burns, looters) and inadvertently caused deterioration (e.g., trail down cutting, erosion, vehicle traffic, and natural causes). ASCARs are completed annually to record impacts to sites.

The frequency of ASCAR updates depends on the amount of destructive influences in close proximity to the resources. Possible destructive influences may be determined during the initial inventory or subsequent monitoring. For example, if a site is near a campground or popular trail,

archaeologists will monitor the site more frequently to ensure site integrity. If the site is threatened, a recovery plan is implemented which may include reroute of a trail, mitigation efforts at the site, or excavation of the site. Artifacts from an excavation may be given to the park for interpretation and visitor center displays or may be stored at the State Archaeological Collections and Research Facility in Sacramento (SACRF).

After an SVRA has been inventoried, archaeologists revisit those sites where a higher level of impact is possible. Archaeologists and/or monitors conduct a surface survey, determine site boundaries, document the site's condition, and photograph the site. Site details, including boundaries, artifacts, and damage are recorded using GPS equipment.

Stabilization of cultural resources is required when condition monitoring analysis concludes the site may be deteriorating or be potentially lost as a result of natural or man-made processes. Forms of stabilization can include, but are not limited to the following: capping, planting vegetation to stabilize the site from erosion, or fencing the site boundary to deter access. In some cases resources cannot be stabilized, in which case an excavation of the impacted area is required to recover a sufficient amount of the resource's surface and subsurface archaeological data.

In addition to the archaeologists' ongoing monitoring efforts, the Division also facilitates resource monitoring programs through relationships with additional divisions within California State Parks, various California universities, professional agencies, stakeholders, OHV groups, communities of interest, and individual members of the public to assist in monitoring efforts. Initiating cooperative relationships with a range of outside agencies and the public helps the Division to better manage and preserve its cultural resources through site stewardship.

### The California Archaeological Site Stewardship Program

The CASSP is an example of a Division cultural resource monitoring program managed through site stewards. The CASSP is utilized by a multitude of state agencies to involve members of the public in an effort to better monitor,





CASSP field trip at Carnegie SVRA

preserve, and manage archaeological sites. CASSP is composed of volunteers who share a common goal and desire to protect California's rich cultural heritage. The objective of this program is to recruit professional archaeologists and trained volunteers as stewards to monitor sites throughout the state. The application of CASSP at the Division helps to reinforce its ongoing effort to preserve prehistoric and historic cultural resources. To initiate a CASSP program at one of the SVRAs, a CASSP representative works with a Division archaeologist to identify the stewardship needs and goals of the park, including identifying which archaeological sites would most benefit from ongoing monitoring. Once the goals and needs are established, a CASSP volunteer workshop is held and members of the public participate in a twoday workshop that includes one, eight-hour-day in a classroom setting and one, in-field training day with a Division archaeologist at the SVRA. Volunteers receive training in the following areas: CASSP goals, cultural prehistory and history pertaining to the SVRA, legal requirements, ethical and confidential<sup>18</sup> requirements related to the treatment of archaeological resources, safety in the field, and basic knowledge of archaeological field surveying methods. The benefits of utilizing CASSP to monitor resources in the SVRAs include:

- Efficient management and preservation of cultural resources through regular monitoring of site conditions.
- Active preservation of cultural resources through early identification of site impact.
- Early identification of sites that require immediate preservation management, such as fencing for better protection.
- A complete annual inventory of each monitoring visit, including documentation of changes to site condition, and mitigations developed for better site preservation to be included in the annual report to the State Historic Preservation Office.
- Public outreach and educational opportunities for various user groups, stakeholders, and members of the public to learn about archaeology, including its management, and preservation.

The success of the CASSP at an SVRA is contingent upon the commitment, involvement, and oversight of park staff and the Division archaeologists. CASSP volunteers require training and guidance to adequately monitor cultural resources. In 2009, Carnegie and Ocotillo Wells SVRAs hosted CASSP training. Training is proposed for Hollister Hills in 2011, with Oceano Dunes and Hungry Valley SVRAs proposed for 2011 and 2012.

### Project Review and On-the-Ground Monitoring of Cultural Resources

Division archaeologists work closely with the staff at the SVRAs to protect, preserve, and promote the park's archeological and historic resources while working to develop projects and facilities that will maintain the integrity of the area and enhance the visitor's experience and enjoyment of the park.

Prior to any project/facility construction, Division archaeologists review the SVRAs project proposal to assess conditions and potential impacts, and to provide mitigations to address those resource impacts. When necessary, archaeological monitors are present for all work to ensure avoidance of significant impacts to resources within the project area.

### **Current Condition of Cultural Resources in the SVRAs**

The following discussions will provide an overview of the condition of the cultural resources, resolution of conflicts to resources, and a summary of resource monitoring at each of the SVRAs.

### **Carnegie SVRA – Cultural Resources**

**Current Condition of Cultural Resources.** Areas within Carnegie SVRA contain resources related to important events in California's prehistory. The SVRA lies in the boundary area between two ethnographic Native American groups, the Northern Valley Yokuts and the Ohlone. Two significant prehistoric sites recorded within Corral Hollow Creek include a seasonal camp site and a rock art site, both of which have been excavated by qualified state archaeologists and archaeologists from San Francisco State University. Although there are no major village sites in the SVRA, data collected from the two excavated sites suggests the area was an important seasonal food gathering and hunting area where trading of important goods took place along with religious ceremonies.

Large areas of Carnegie SVRA contain archaeological evidence of an extensive historic mining landscape, representing the Division's best known example of a cultural landscape. A series of coal, clay, and sand mining operations occurred in the area beginning in 1855 to 1920, with the most successful and significant operation being the Treadwell brothers' Alameda and San Joaquin Coal Mining Company, popularly known as the Tesla Coal Mine. The Tesla Coal Mine, operated from 1895 to 1920, represents one of California's first commercial



Carnegie Brick and Pottery Works

coal mining operations. The variety of operations that took place during this time included clay, coal, and sand mines (Pacific Window Glass Company), a manganese mine, and an industrial brick and pottery operation (Carnegie Brick and Pottery Works) that included, lime kilns, gravel quarries, town sites, and transportation networks (Alameda and San Joaquin Railroad Company). Today, a large mound of mining refuse, mining adits, and a series of house pits from the town of Tesla are all that remain of the Tesla Coal Mine.

Efforts to conduct a complete cultural resource inventory of Carnegie SVRA began in the spring of 2006 through a contract with the Anthropological Studies Center (ASC) at Sonoma State University. It is estimated the ASC will produce a final Cultural Resources Inventory Report late 2010. This inventory will include recording a number of sites, features, and artifacts connected to

an extensive historic mining landscape, as well as sites representative of prehistoric inter-tribal trade corridors.

Summary of Resource Monitoring. A partnership with the CASSP was initiated in 2003 with its first CASSP volunteer workshop. Due to staffing issues, the program did not flourish. However, the Division was committed to reestablishing the program and in the winter of 2009, a permanent CASSP program was established. Currently, there are 11 CASSP volunteers bi-annually monitoring resources within Carnegie SVRA.

**Resolution of Conflict to Resources.** Several sites throughout the SVRA are either fenced or demarked with resource protection signs. Many of the prehistoric sites are fenced, as are portions of the Brickworks and Pottery Plant. One example is a buried historic brick feature near

the Alameda Mine. This feature is located in a trail and is capped with soil. A CASSP volunteer monitors this site. When/if the brick feature is exposed, the volunteer informs the Division archaeologists who in turn informs park maintenance staff to reapply the cap. This has proven to be a successful mitigation that protects the resource and allows continuation of recreational activity.



On the Tesla property, where currently no OHV use is allowed, some sites have been vandalized by pot hunters. To address these impacts to the resources, the mining

Tesla Mine tailings, Carnegie SVRA

portals are closed and thus protected from vandals. However, a number of the archaeological resources in Tesla are still impacted. The SVRA has increased ranger patrols and monitoring of



Mine adits, Carnegie SVRA

the site by park personnel. Public access, education, and CASSP volunteers may help deter those who currently trespass on the property. Archaeologists will be involved in future project planning and design to either completely eliminate or mitigate adverse affects to these valuable resources.

In the fall of 2008, the Division, the California Department of Conservation, and the U.S Office of Surface Mining, worked together to close many of the historic mine adits because of their potential threat to public health and safety. By using the

data collected by the ASC during their cultural resources inventory, the Division, along with the additional agencies, identified the most desired method of mine closure to achieve success and allow for public safety, wildlife movement, and minimal impact to the historic mining resources.

#### **Clay Pit SVRA – Cultural Resources**

**Current Condition of Cultural Resources.** Present-day Clay Pit SVRA was excavated as an impervious borrow area to construct the Oroville Dam in 1964. The Oroville Dam itself is located on the Feather River approximately five miles northeast of the city of Oroville. Any cultural resources that may have existed in the interior of Clay Pit SVRA prior to the 1964 excavation have since been destroyed. Clay Pit SVRA's history is tied to the statewide effort to create reservoirs during the State Water Project. Additionally, the park contains dredge tailings dating to the gold rush era. This park has the potential to yield information about



A rotary train car dumper

early California gold dredging activities and the State Water Project.

When the Division archaeologists conducted a resources survey of Clay Pit SVRA in October 2008, they found several items related to these events. The field survey also identified one previously undocumented historic site, and no prehistoric sites. There are no previously recorded prehistoric archaeological sites in the vicinity of Clay Pit SVRA. The 1964 landscape disturbance from the construction of the Lake Oroville Dam has altered the natural surface, thereby limiting the probability of relocating remnants associated with prehistoric cultures that existed in the project area.



Clay Pit area before soil excavation

Summary of Resource Monitoring and Resolution of Conflict to Resource. Cultural resources monitoring plays an important role in documenting the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources within the SVRA. In regards to Clay Pit SVRA, the data collected from the cultural resource inventory<sup>19</sup> determined the park does not contain resources that would require monitoring at this time; hence, there is no known record of resolution of conflict to resources at Clay Pit SVRA.

### Heber Dunes SVRA – Cultural Resources

**Current Condition of Cultural Resource.** Heber Dunes SVRA is located in the Colorado Desert south and west of the Chocolate Mountains, in the Imperial Valley of the Salton Trough. The prehistory of Heber Dunes SVRA is generally divided into three periods of occupation extending as far back as 12,000 years before present. The ethnographic group of this park is within the traditional territory of the Kamia who spoke a Yuman language, which is part of the Hokan language family, and whose territory extended across the Imperial Valley down into northeastern Baja California.

Spanish expeditions of the Imperial Valley began as early as 1769. The archaeology of this time period is reflected with religious and military settlements. Cattle grazing and ranching was established during the Mexican period (1821-1848). Cattle ranching dominated the agricultural activities of this area until the Gold Rush of 1848. As the American immigration to the west began, a homestead system was established bringing in transportation routes, including mail and stage routes, and irrigation districts that delivered water to the ranches.



Ocotillo Wells District archaeologists contracted for an inventory and a Cultural Resource Inventory Report for Heber Dunes SVRA as part of the General Plan process. This report was finalized in December 2009. Currently there are no recorded prehistoric sites or resources within Heber Dunes SVRA. Only one cultural resource has been previously recorded within one mile of the park. This is a segment of the South Alamo Canal which was originally constructed in 1908 and has since undergone maintenance. AECOM 2009 survey identified one historic site consisting of early 20th century historic artifacts.

**Summary of Resource Monitoring.** Cultural resources monitoring plays an important role in documenting the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources within the SVRA. The current cultural resources inventory completed provides a good understanding of the history and resources of the area. Because the only recorded site has been determined ineligible for listing on the National Register and the California Register, monitoring of the site can easily be accomplished by Ocotillo Wells staff as applicable.

**Resolution of Conflict to Resources.** The one reported site within the park is unaffiliated with any historic building or structure and has been determined ineligible for listing on either the National Register or California Register. Because there is only one site, Ocotillo Wells District archaeologists do not anticipate any conflicts to arise or need to be resolved regarding this resource.

### Hollister Hills SVRA – Cultural Resources

**Current Condition of Cultural Resources.** Hollister Hills SVRA occupies an area with an intricate and long history. Several prehistoric village sites within the SVRA suggest long-term use by the Ohlone tribe. The SVRA is located within what was two Mexican land grants. The historic

land grant names are still used throughout San Benito County. The park entrance is located off Cienega Road, which means swamp in Spanish, and is a remnant name from the Cienega del Gabilan land grant.

During the early 1900s, ranching, farming, and mining were the main industries of San Benito County, and all these activities were performed in areas within the present-day SVRA. Certain techniques developed



Harris Walnut Orchard

within the old ranch lands of Hollister Hills SVRA helped to revolutionize the agriculture industry during the Great Depression. Howard Harris balanced his passion for agriculture with his desire to provide a park open to OHV recreation. Over time, the primary use of the land was for OHV recreation. The last phase of history at Hollister Hills SVRA included previous land owner Howard Harris' Motorcycle Playground in the early 1970s.



A Cultural Resource Inventory Report for Hollister Hills SVRA was completed in 2010, and provides a rich collection of prehistoric and historic resources. In particular, there are large village sites with intact midden deposits (data), groundstone, and lithics. The artifacts and depth of the prehistoric deposits at these sites have the potential to yield much needed data about the prehistory of San Benito County. Ironically, because San Benito County has not had significant development (large housing developments, shopping malls, etc.) extensive archeological review has not occurred thus making the cultural resources at Hollister Hills a valuable window to the past.

The Vineyard Schoolhouse, built in 1891, is an excellent example of an historic building which has historical significance. Located at the entrance to the Upper Ranch, it is in good condition and is used for classes and special events.

**Summary of Resource Monitoring.** Cultural resources monitoring documents the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources. Hollister Hills SVRA's resources are



Vineyard Schoolhouse

actively protected and studied by the Division's archaeologists. Archaeologists monitor the park's resources on an ongoing basis, annually and as necessary. Based on the data potential of many of the prehistoric and historic resources in the park, Hollister Hills SVRA will greatly benefit from CASSP. Division archaeologists anticipate developing a site stewardship monitoring program in 2011.

**Resolution of Conflict to Resources.** Hollister Hills SVRA contains many resources related to many aspects of its previous prehistoric and historic land use. Completion of the Cultural Resource

Inventory Report in 2010, now provides staff with a database of significant resources, many of which were previously unknown and not always obvious to a non-cultural resource professional.

One notable case of resource conflict resolution occurred in early August 2008 following a CalFire conservation crew's removal of a large majority of the historic Harris Walnut Orchard's canopy. To resolve further impact to this resource, a condition assessment survey took place in August 2008 to determine the extent of damage and eligibility of the orchard to



Walnut Orchard

the National Register. Division archeologists evaluated the site and determined the prehistoric component needs to be excavated. Additionally, the survey determined that the orchard is associated with the booming walnut cultivation period experienced throughout the state prior to



Windmill site, Hollister Hills SVRA

World War II. Further research is necessary to determine the Walnut Orchard's level of integrity according to National Register criteria. Presently, Division archaeologists, the District Superintendent, as well as the park's maintenance staff, have been working together to assess the current condition of the orchard and discuss its potential as a future interpretative/picnic visitor area for the park.

### Hungry Valley SVRA – Cultural Resources

**Current Condition of Cultural Resources.** Hungry Valley SVRA includes three cultural preserves, the highest level of protection that can be afforded to cultural resources within an SVRA. Cultural resources included in cultural preserves generally represent the best examples of important information about our heritage and history. The cultural preserves within Hungry Valley SVRA protect important prehistoric archaeological sites associated with the Alliklik/Tataviam tribe. This is an ethnographic group whose history is not well known due to poor recordation by ethnographers during the early 1900s. The little information known about this tribe has been determined from archaeological sites located in the nearby Antelope Valley, and more research is needed to

clarify the ways of the ancient people that inhabited Hungry Valley SVRA. The archaeological sites within the park have a high potential for yielding information to fill in gaps in our knowledge of California prehistory.

Hungry Valley SVRA also contains many early homesteads and has a high potential for contributing information about the history of early settlement patterns and homesteaders in California. Historic research is currently taking place by the Division cultural staff regarding Hungry Valley SVRA.



Mortar and Pestle

Efforts to update the resource inventory at Hungry Valley occurred between 2000 and 2005 but due to the complexity and acreage of the

park, the resource inventory was never completed. Pre-field research has however, now begun and Division archaeologists intend to complete a Cultural Resources Inventory Report for Hungry Valley SVRA by the end 2012.

Summary of Resource Monitoring and Resolution of Conflict to Resources. Cultural resources monitoring plays an important role in documenting the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources in the park. Division archaeologists are in the initial stages of preparing Hungry Valley's Cultural Resources Inventory Report which will provide important information to facilitate staff monitoring efforts. In the meantime, archaeologists and Hungry Valley SVRA environmental scientists continue to monitor known sites and prepare ASCARs as necessary to protect and monitor the condition of the park's resources.



Environmental scientists have been successful in preventing conflict to cultural resources. Currently, some sensitive cultural areas have been fenced off for their protection, while others are difficult to identify and have been left undisturbed by park visitors. Division archaeologists plan to establish a CASSP at the park following the completion of a cultural resource inventory, likely in 2012.

### **Oceano Dunes SVRA – Cultural Resources**

**Current Condition of Cultural Resources.** Oceano Dunes SVRA is located within San Luis Obispo County. Archaeological excavations in the area surrounding the park have uncovered data dating back at least 11,000 years ago, allowing archeologists to establish the time frame this area was occupied by Northern Chumash, one of the oldest tribes in California. The prehistoric



Shell Midden

archaeology of Oceano Dunes SVRA ranges from sparse shell scatters and temporary camps to burials and large shell midden sites. Individually, as well as collectively, these sites have the potential to provide Division archaeologists information about the subsistence economy, material culture, and settlement organization of the prehistoric Northern Chumash culture based on artifacts, features, soil, and sites, among other resources.

Oceano Dunes SVRA also contains historic-era resources (e.g., lumber, trash, metal art work, and ruins of what used to be wooden

shelters) related to camps built by a loose knit band of hobos, mystics, writers, and escapees from society who sought shelter in the sand dunes following the Spanish American War. These people are popularly known as "the Dunites."

A large majority of the park's extensive number of recorded archaeological sites were originally identified during several cultural resource inventories of the area beginning in 1958. The most recent cultural resource inventory study of the SVRA was conducted in 2005. The survey objectives were to relocate and update sites in areas of Pismo State Beach and Oceano Dunes SVRA previously identified in the late 1950s. A more recent Cultural Resources Inventory Report for Oceano Dunes SVRA was completed by Division archaeologists

Oceano Dunes SVRA was completed by Division archaeologists in late 2010.

**Summary of Resource Monitoring.** Cultural resources monitoring plays an important role in documenting the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources at Oceano Dunes SVRA. The park's resources are actively protected and studied by Division archaeologists. Significant sites are monitored annually or as necessary. ASCARs are prepared on a project basis to monitor the condition of the resources. Division archaeologists anticipate initiating CASSP at the park in the fall of 2011.

**Resolution of Conflict to Resources.** A large majority of known cultural resources in the park are either fenced to prevent trespass



Motorcycle rider circa 1900s

or have been capped to reduce damage from public activities. Division archaeologists have an active consulting relationship with Northern Chumash Tribal representatives to adequately determine the best methods in resolving potential conflict to cultural resources. The park's environmental scientists also regularly consult and work with Division archaeologists as well as Northern Chumash Tribal representatives to help avoid or mitigate adverse affects to known resources.



Archaeological site stablization



Archaeological site stablization

### **Ocotillo Wells SVRA – Cultural Resources**

**Current Condition of Cultural Resources.** Ocotillo Wells SVRA is located where four traditional ethnographic territories converge—the Kamia, Diegueno, Cahuilla, and Yuman groups—all of whom developed special adaptations to the arid desert environment. The prehistoric life ways that once occurred in the present-day park revolved around the fluctuation of the now extinct Lake Cahuilla. The prehistory of this area can be divided into four chronological periods extending as far back as 12,000 years. The park preserves the largest collection and variety of resources within the Division ranging from flake scatters and temporary camps to rock rings, food processing sites, and large village sites. Most significantly, this is the only area in California where pottery was used in prehistoric times.

Areas within Ocotillo Wells SVRA contain places where California's earliest recorded history began in 1769. Juan Bautista de Anza led his expedition through the area. Today, portions of the trail still exist in the park. Countless other Spanish expeditions traveled through the area as late as 1796. The area was relatively isolated and little used except by the occasional wagon party until approximately 1853 when government surveying parties entered the area, and in 1866 the Southern Pacific Railroad opened up the land for commerce and settlement. Prospectors



Fish Trap

began searching for oil in 1851, but very little oil was ever produced. During the 1930s, agriculture in the Imperial Valley flourished as water control systems were implemented on the Colorado River. Portions of the Worth Toner homestead, a small ranch with water, alfalfa, and turkeys, established around 1950, still exists within the park. During World War II, large portions of the desert were used for military training. Many of these military sites also exist within the park today. Alicia Perez, Associate State Archaeologist for the Division, inventoried these military resources as part of her Master's thesis completed in 2009.

A cultural resources inventory was conducted and a report completed for a portion of Ocotillo Wells SVRA in mid-2010. This survey included areas around the ancient Lake Cahuilla lakebed. It is anticipated an inventory and report for the remainder of the park will be completed by the end of 2013.

**Summary of Resource Monitoring.** Aside from resource monitoring completed by CASSP stewards, annual ASCARs are completed by District archaeologists in order to monitor the condition of these resources. In addition, archaeologists from the State Parks' Southern Service



Prehistoric Core

Center are assisting Ocotillo Wells' staff by inventorying portions of the park to update site records in order to have the most current data for planning decisions. Areas of the park not being inventoried by the Southern Service Center are being covered by District archaeologists and volunteers from CASSP. Park resources are also monitored by the local Native American community. It is projected that a complete inventory of resources of Ocotillo Wells SVRA will be completed by winter 2012.

**Resolution of Conflict to Resources.** Due to the fragility of the park's resources in this desert environment, larger village sites with sensitive resources are

fenced off after consultation with local Native American groups. Additionally, traditional cultural properties and sacred sites are protected. Volunteers from CASSP are used to monitor impacts to these resources.

### **Prairie City SVRA – Cultural Resources**

**Current Condition of Cultural Resources.** Prairie City SVRA is located within the ethnographic boundary of the Nisenan, the southern most tribe of the Maidu language group. The Nisenan were the largest of three Maidu groups, and they lived in large villages along the American and Sacramento Rivers. While currently there are no prehistoric sites within the SVRA, there are several large village sites along U.S. Route 50, north of the park so it should not be discounted that the area may have once been occupied by prehistoric peoples. Given the extensive historic-era mining activities that once took place in today's Prairie City SVRA, it is likely the prehistory has



Moon Room

been previously impacted and lost under the dredging piles related to the gold mining period of the area.

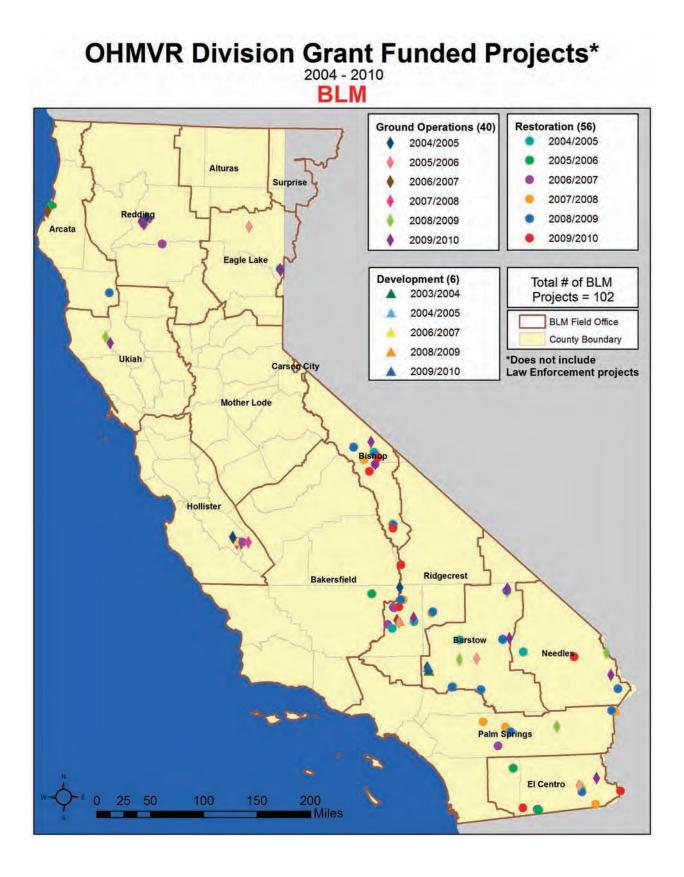
Portions of Prairie City SVRA were at one time part of the Folsom Mining District. The park includes two types of placer dredging tailings associated with the operations of the Capitol Dredging Company from 1927 to 1952. Until the early 1960s, the area was occupied by cattle ranchers before being purchased by the Aerojet General Corporation to build and test rocket engines for

the federal government. One potential cultural resource eligible for the National Register is the Moon Room, built by Aerojet in the 1960s for monitoring rocket testing. It is one of only two similar structures currently standing in the United States.

The Division's archaeologists completed a Cultural Resource Inventory Report for Prairie City SVRA in 2010. This park has the potential to yield information about military evolution and advancement in science and technology.

Summary of Resource Monitoring and Resolution of Conflict to Resources. Cultural resources monitoring plays an important role in documenting the Division's ongoing efforts to ensure, or verify, the avoidance of effects on known cultural resources at Prairie City SVRA. Division archaeologists monitor and prepare ASCARs as applicable to protect the condition of the park's resources. That being said, aside from a historic trash pit found at the SVRA, there are no significant cultural resources at Prairie City SVRA. The trash pit is monitored by Division archeologists, thus, there is no demand for CASSP monitors at the SVRA. There is no known record of resolution of conflict to resources at the park.





# **Condition of Natural and Cultural Resources in Federal Areas Receiving OHMVR Grant Funding**

### **BLM Natural Resource Conditions**

The BLM manages approximately 16.2 million acres of public lands in California. These public lands include both scattered parcels and large contiguous areas of land throughout the state. The state is administratively divided into three districts and 15 field offices.

The Northern California District includes five field offices: Alturas, Surprise Field Office (Cedarville), Eagle Lake Field Office (Susanville), Redding, and Arcata.



Ridgecrest Field Office

The Central California District includes five field offices: Ukiah, Mother Lode Field Office (Folsom), Hollister, Bakersfield, and Bishop.

Southern California BLM lands are managed by five field offices from the California Desert District (CDD) Office in Moreno Valley, near Riverside. The five offices include Ridgecrest, Barstow, Needles, Palm Springs-South Coast, and El Centro.

OHV activities on public lands are regulated under the CFR (43 CFR, Part 8340), which is tied to underlying federal law. The allocation process for defining appropriate levels of motorized access includes the designation of areas identified in land use plans.

Areas are generally designated for motorized access as Open, Limited, or Closed.

- Open Designation lands are acceptable for motorized use on roads, trails, or cross-country access.
- Limited lands are acceptable for motorized use subject to specific limitations such as specific seasons, times of day, type of vehicle, existing trails, or designated trail use only.
- Closed areas preclude any motorized activity.

As of October 1, 2009, over 550,000 acres were designated as Open; over 11 million acres were designated as Limited, almost 4.6 million acres were designated as Closed, and over 33,000 acres were undesignated.



Ukiah Field Office

BLM is working on a comprehensive inventory of roads and trails throughout its system, but the difficulties of formally mapping such a large area and the various definitions of limited use complicate the task. In general, the BLM nationally and in California is moving toward a formally designated network of open roads and trails across all public lands where OHV use is allowed.

Multiple Use, the administrative framework that defines use of federal public lands, is key to management of motorized activities



Eagle Lake Field Office

on BLM lands in California. Multiple Use involves sustainable management of public lands for multiple uses (includ-



Ridgecrest Field Office

ing timber, range, water, recreation, and wildlife). To the extent possible, BLM lands are administered to allow as broad a spectrum of activities on public lands while promoting long-term resource protection.

While some BLM lands provide opportunities for intensive OHV activities, most BLM acreage in California is actually

planned, allocated, and used for more remote motorized access. Much of the value of the public

lands is derived from the extensive and varied nature of the landscapes and the variety of activities that are facilitated by motorized access across public lands.

#### **BLM OHV Areas**

California BLM field offices that manage high intensity OHV activities are the principle beneficiaries of the Grants Program; however, grants have also been awarded to assist with management of more remote



El Centro Field Office

areas throughout California. The following provides an overview of the diverse opportunities



El Centro Field Office

available on BLM lands in California.

### California Desert District

The El Centro Field Office manages the Imperial Sand Dunes Recreation Area (ISDRA), a large area of sand dunes adjacent to the California/Mexico border, just west of Yuma, Arizona. This area is one of the most popular recreational areas in BLM. Currently a fee area, ISDRA accommodates large groups of OHV enthusiasts recreating in a variety of OHV vehicles including dune buggies, motorcycles, and ATVs equipped for dune use. In response to litigation and the classification of critical habitat for the Pierson's milk-vetch by the BLM, in 2008 the El Centro Field Office embarked on a new Recreational Area Management Plan (RAMP) covering 150,000 acres of BLM managed land. Once finalized, the new RAMP will replace the previous 1987 and 2003 RAMP documents and will guide the management of public lands within the jurisdiction of the El Centro Field Office.



Palm Springs-South Coast Field Office

The Palm Springs-South Coast Field Office manages a number of areas in the open desert, mostly east of the developed areas of the Coachella Valley. The Palm Springs-South Coast area includes a large number of scattered parcels throughout Riverside, Los Angeles, Orange, and San Diego Counties. In 2002, the Palm Springs-South Coast Field Office, along with the public, reviewed and approved the Northern and Eastern Colorado Desert Plan, which designated routes as Open or Closed for motorized use. Through this plan, over 1,500 miles of trail were set aside for OHV use.

The Needles Field Office manages a large area of public lands west of the Colorado River and west of the California border along Interstate 40. The Field Office is responsible for the maintenance of 3,200 total miles of backcountry routes, which are mostly accessible by four-wheel drive



vehicles, and are adjacent to 18 designated wilderness areas. Due to the high volume of OHV recreational use, Field Office staff must actively manage the area to protect the natural and cultural resources and to ensure public health and safety.

The Barstow Field Office is responsible for the management of five popular OHV recreational destinations: Dumont Dunes, El Mirage, Johnson Valley, Rasor, and

Stoddard Valley OHV recreational

areas. These areas are authorized as Open riding areas and attract thousands of recreationists annually. These five OHV recreation areas were identified in the original 1980 California Desert Conservation Area Plan and have provided world class OHV opportunities for 30 years. The Field Office works in partnership with nonprofit organizations as





Ridgecrest Field Office

well as with the Division to provide visitor services, facility maintenance, and resource protection.

The Ridgecrest Field Office is located in the western Mojave Desert and is a transition zone between the West Mojave Desert bioregion, the Sierra Nevada, Great Basin, and San Joaquin Valley bioregions and manages nearly 1.8 million acres of public lands in Kern, Inyo, Mono, Los Angeles, and San Bernardino Counties. The management area includes four OHV Open areas, 3,040 miles of

roads and trails, 16 wilderness areas, approximately 83 miles of the Pacific Crest Trail, and 20 Areas of Critical Environmental Concern (ACEC). OHV recreation opportunities can be found both within designated OHV Open areas and along the designated trail system that travels across public lands. The four Open areas managed by the Field Office include: Jawbone Canyon, Dove Springs, Olancha Dunes, and Spangler. All of these Open areas cover approximately 90,000 acres of land. Surrounding these areas is about a million acres of Limited Use



Ridgecrest Field Office

lands and an extensive road and trail system of over 3,000 miles that is enjoyed for OHV touring opportunities along with providing access to many non-motorized recreational opportunities.

### **Central California District**

The Bishop Field Office is responsible for managing 750,000 acres of public lands in Inyo and Mono Counties, which include 2,500 miles of trails and 1,894 acres of OHV recreation opportunity. The Field Office collaborates with the surrounding local and federal agencies in managing



Bakersfield Field Office

the public lands as only 2% of land within Inyo County and 6% of land within Mono County is comprised of private ownership.

The Bakersfield Field Office manages 612,000 acres of public lands with 4,000 miles of routes available for OHV recreation in eight Central California counties stretching from the California Coast to the crest of the Sierra Nevada. The most popular location for OHV recreation is the Keyesville Special Recreation Management Area (SRMA). The Keyesville SRMA is comprised

of 7,029 acres, with approximately 80 miles of trail. The primary OHV opportunities are on natural surface multiple-use trails suitable for ATVs, RUVs, and motorcycles; limited opportunities exist



Hollister Field Office

for larger OHVs (4x4, dune buggy, etc.). Some of the trails have been designated singletrack providing OHV opportunities solely for motorcycles. The SRMA also allows motorcycle trials activities at 10 designated locations associated with a Special Recreation Permit.

The Hollister Field Office administers approximately 284,000 acres of public land located in Central California. Bounded by the Pacific Ocean to the west and the San Joaquin Valley

to the east, elevations range from sea level to over 5,000 feet. Major landforms include the Diablo Range, Salinas Valley, and San Joaquin Valley. The Clear Creek Management Area (CCMA) was a popular destination for OHV recreation. In May 2008, BLM issued a temporary closure for the CCMA as a result of an Environmental Protection Agency (EPA) study of naturally occurring asbestos in the area's serpentine soils, and the potential health risk to recreational users and others who may be exposed to dust from the area. An Environmental Impact Study (EIS) and management plan is being prepared with public input to determine the acceptable types and levels of use in the area. Hollister Field Office is also working with the Central California Resource Advisory Council to determine additional locations that may be available for OHV opportunity elsewhere in the Hollister Field Office area.

The Ukiah Field Office manages OHV recreation within the South Cow Mountain and Knoxville OHV Recreation Areas. Cow Mountain Recreation Area consists of 51,513 acres and is divided into two areas. South Cow Mountain comprises approximately 23,000 acres managed for OHV recreation. North Cow Mountain comprises approximately 28,000 acres managed for non-motorized recreation. There are a few inholdings totaling about 1,100 acres. Knoxville OHV Recreation Area is approximately 24,000 acres. Between the two areas, there are about 152 miles



Ukiah Field Office

of OHV roads and trails, three staging areas, and three developed campgrounds. The Cow Mountain and Knoxville OHV Recreation Areas are very popular due to their close proximity to the San Francisco, San Jose, Oakland, and Sacramento metropolitan areas.

### Northern California District

The Eagle Lake Field Office offers many acres of designated routes for hunting, exploring, primitive camping, and other similar activities. The main OHV recreational area within the Field Office



Eagle Lake Field Office

is the Fort Sage SRMA, located 45 miles southeast of Susanville and 45 miles north of Reno, Nevada. The Fort Sage SMRA encompasses 28,494 acres with 90 miles of designated OHV routes. Visitors to the recreational area generally travel from the city of Susanville and the surrounding Lassen, Sacramento, Plumas, and Washoe Counties to experience OHV recreation opportunities.

The Redding Field Office manages 250,000 acres of public land. The key OHV recreational opportunity managed by the Field Office is the Chappie-Shasta OHV Recreation Area. Chappie-

Shasta offers approximately 200 miles of road and trail accessible for OHV recreation. The Chappie-Shasta OHV Area initially consisted of mixed land ownership, with approximately 27,000 acres of BLM, 12,000 acres of USFS, and 21,000 acres of private lands, for a total acreage of approximately 60,000 acres. In 2010 federal legislation transferred control of 12,000 acres from the Shasta-Trinity National Forest to the Redding Field Office to ensure consistent management of the area.



The Arcata Field Office is responsible for the administration of natural resources, lands, and mineral programs on approximately 200,000 acres of public land in Northwestern California. A popular OHV recreation destination is the 300-acre Samoa Dunes Recreation Area on the North Spit of Humboldt Bay west of Eureka. One hundred forty (140) acres are available for open riding; the remaining acreage is closed to OHV recreation due to endangered plant and wetland protection areas.

### Natural Resource Management and Challenges/ Ecotypes Throughout California

Although the majority of land managed by California BLM is located in the California Desert District, as noted above, BLM manages a significant amount of public lands throughout the state. The various ecotypes where most OHV use occurs can be typified into six broad categories, with roughly similar management issues; they are as follows.

## Field Offices: Alturas, Bishop, Eagle Lake, Surprise

**Basin and Range** 

The basin and range areas in California include the areas east of the Sierra Nevada and Cascade Range, which continues east of the California border into Nevada and eastern Oregon. These BLM areas are far from major population centers; most of the OHV use is from local riders. Most of

> the areas are located above 3,500 feet elevation. Climates are generally arid during the summer with long

cold winters, including some snow. Management issues include large areas with low densities of use that are difficult to monitor and patrol effectively, difficulty in enforcing use of designated routes in open terrain, motorized uses

### Sand Dunes

Field Offices: Arcata, Barstow, El Centro, Ridgecrest

Sand dunes are a very popular motorized recreational feature and occur on BLM lands in both marine and desert locations. Management issues include the need for intensive management to enforce regulations for resource protection, and health and safety. Resource issues can include airborne dust production, protection of endemic plants and wildlife, and sanitation issues like wastewater and littering.



Bishop Field Office

for hunting and other

activities that are not generally considered typical OHV use, thus requiring additional user education. Resource issues include protection of sensitive species such as sage grouse, eagles, and others; slow vegetative regeneration due to climate extremes; and relatively high erosion potential due to the combination of dry summers and heavy winter rainfall.



Eagle Lake Field Office

Bishop Field Office

### High Country Woodlands

Field Offices: Bakersfield, Redding, Ridgecrest

BLM manages relatively few areas of conifer woodlands in California, and the only intensively used area is the Chappie-Shasta OHV area, west of Shasta Dam near Redding.



Designated routes are more easily established and maintained in these wooded areas than in the



Ridgecrest Field Office

more arid areas of the state. Resource related issues include sensitive plant and wildlife species and the potential for erosion due to water runoff.

Bakersfield Field Office

Valley/Foothills

### Field Offices: Folsom, Hollister, Ukiah

Other than the California desert, valley/foothill areas make up the second largest zone of BLM lands throughout the state. South Cow Mountain in the Ukiah Field Office provides the largest OHV opportunity while other field offices host varying degrees of OHV recreation in designated areas and on roads and trails. Resource and management issues include warm, often arid summers that can produce heavy brush and relatively high wildfire danger, requiring specialized brush clearing to



Hollister Field Office



keep trails open; heavy rainfall during the wet season requiring additional trail maintenance, occasional closures, and erosion control measures; localized sensitive species; and potentially toxic materials in soils and associated threats to health and safety.

Hollister Field Office

### **Mojave and Sonoran Deserts**

Field Offices: Barstow, El Centro, Needles, Palm Springs-South Coast

The California Desert District is spread across almost one quarter of the landmass of the entire state. The area is generally very arid, with low levels of vegetative biomass. Much of the area is relatively close to population centers of Southern and Central California. OHV use began in the desert in the early 1960s. The slow regenerating vegetation and slow soil development make it difficult to restore or close unauthorized trails to original conditions. In addition, intensive OHV use spread



Barstow Field Office

over a large area can be difficult to manage. Management issues include peak visitor loads that tend to happen simultaneously across the area; arid soils are difficult for trail maintenance; trails are difficult to mark effectively for delineating designated routes; relatively easy cross-country access increases the potential for trail proliferation; and numerous private inholdings cause potential visitor conflicts between neighboring landowners and OHV visitors.

Resource issues include numerous sensitive, often slow-recovering plant and wildlife species; slow soil development; wind and water erosion protection over large areas and miles of roads and trails; high potential for conflict and litigation due to creation of fugitive dust from OHV use; and high potential damage to cultural resources.

### Colorado River Riparian and Upland Areas

Field Offices: El Centro, Needles, Palm Springs-South Coast

Although the Colorado River corridor is relatively isolated from major population centers, its importance as habitat, its concentration of cultural artifacts, and its relative isolation make it important beyond its relatively small size. Management issues include the distance from managing offices and generally vast, remote lands make patrols difficult. Resource related issues



El Centro Field Office

include important woodland and



El Centro Field Office

adjacent riparian areas creating habitat corridors critical for migrating birds and other wildlife; the potential for erosion from use on arid soils that are subject to strong monsoonal rain events; and potential damage to geoglyphs and other cultural features concentrated along the Colorado River corridor.

### **BLM Resource Management Initiatives**

To ensure these resources are maintained in good condition, the BLM must actively manage OHV recreation. Its partnership with the Division has been a valuable component of providing sustainable, long-term OHV recreation. The following examples describe just a few of the initiatives the BLM is undertaking throughout its lands to address some of the above challenges to natural resources management.



Desert Tortoise

Of particular concern is maintaining and protecting populations of sensitive desert reptiles. The Division has awarded the BLM a grant to study the effectiveness of current management practices allowing OHV activities in some of the desert washes within the Desert Wildlife Management ACEC in Riverside and San Bernardino Counties.

The BLM Barstow and Hollister Field Offices have been especially active in removing noxious invasive weeds. In Afton

Canyon ACEC, a popular recreation destination east of Barstow,

BLM staff has been vigilant in its efforts to control the spread of tamarisk to allow and promote the growth of native willows and mesquite in the canyon riparian woodland. In southern San Benito County, the BLM has been undertaking prescribed burns to promote growth of rare native plants and halt the spread of yellow starthistle into OHV recreation areas.

Keeping trails in good condition by reducing soil erosion, and developing staff expertise for rapid response to erosion problems associated with OHV trails, is a major goal for BLM OHV recreation



Tamarisk

programs. The BLM is partnering with the Division and the USDA Natural Resource Conservation Service to train BLM staff in improved methods of erosion control related to OHV recreation, and in monitoring and diagnosing potential erosion problems in advance, allowing staff to act early to avoid erosion. Implementation and training in the 2008 Soil Conservation Standard is one example of how this partnering is being accomplished.

### **OHV Opportunity Concerns**

The potential for loss of available OHV opportunity on BLM lands in California over the next decade is significant. Several potential and pending issues may affect the level of opportunity available in the future. Some key issues facing BLM management of land include:

### **Renewable Energy**

Due to the nature of the Multiple Use mandate, areas of land are allowed to be utilized for a number of compatible uses, including recreation. The need for large areas of land for production



of renewable energy may change the balance of available land that has previously been allocated for multiple use. If the existing uses are not compatible



with a use deemed nationally important, the existing uses may be limited or eliminated.

As of January 2010, BLM had received 93 applications for potential wind generation projects and 57 solar projects statewide. Of these, 69 of the wind and all 57 solar projects are located in areas of the California Desert District, many in areas that currently provide OHV opportunity.

### Military Expansion, California Desert District

The United States Marine Corps has proposed an expansion of its 598,000 acre Air Ground Combat Center at Twentynine Palms in Southern California to increase its live-fire training facilities. In order to do this expansion, the Marine Corps is conducting studies and public review of a proposal to convert 180,000 acres of BLM land in Johnson Valley to military ownership.

### Naturally Occurring Asbestos and other Toxic Soils

Liability from potential visitor health and safety issues has long been a concern to agencies such as the BLM that manage OHV use. This concern is typically largely due to the potential for injury due to the risk inherent in OHV recreation, but land managers must also consider other hazards.

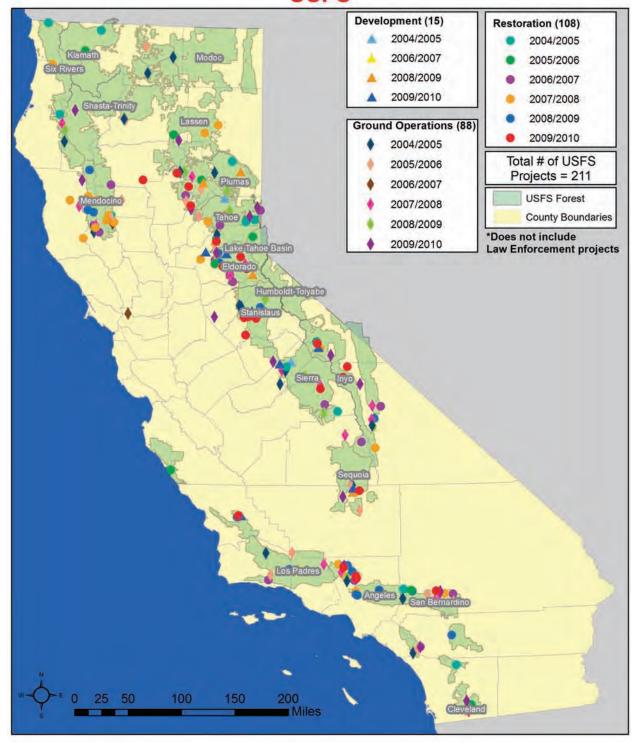
An EPA study determined naturally occurring asbestos in Clear Creek poses a public health threat. Other areas of California have other health hazards related to natural or man-made toxins that exist in soils of areas used for OHV recreation. For example, depending on the site, the BLM must consider potential hazards such as arsenic, cyanide, mercury, or in the case of the Central Valley, valley fever spores.

### Litigation

Much of the process for allocating uses on public land involves complex and controversial studies and public input, and decisions to best balance the needs of many strongly held beliefs and understandings. In many cases, the planning decisions result in litigation from individuals or groups wanting a different outcome. The outcome from litigation is often dictated by the courts, imposing a set of solutions that BLM is unable to predict or to control.

### OHMVR Division Grant Funded Projects\* 2004 - 2010

USFS



### **USFS Natural Resource Conditions**

The USDA Forest Service Pacific Southwest Region (California) serves an increasingly urban, ethnically diverse, population. The mission of the USFS is to sustain the health, diversity, and productivity of the Nation's Forests and grasslands to meet the needs of present and future generations. The mission of the Pacific Southwest Region Recreation Program is to sustain ecosystems and serve people through innovative recreation leadership and partnerships for facilities, services, and programs.

The 18 National Forests managed in California, covering over 20 million acres, are located in the North Coast, Cascade, and Sierra Nevada ranges, and from Big Sur to the Mexican border in the



South Coast range. They are home to such unique scenic areas as Mt. Shasta, Lake Tahoe, Mt. Whitney, and the Big Sur coast as well as important ecological and prehistoric sites. They provide places for high-quality recreation experiences, adventure, learning, challenge, and quiet contemplation and help generate both a vision and a land ethic that sustain the environment



and the people in it. These National Forests account for 25% of National Forest recreation nationwide and about half of the public wildland recreation in the state. National Parks and other federal, state, county, and private lands provide the remainder.

### Fish, Wildlife, and Plants

More than 600 of the 800 species of fish and wildlife in California inhabit the National Forests, making the USFS the single largest habitat manager in the state. National Forests are also home to

nearly 4,000 of the 6,500 native plants in California. Recovery programs include

protection of critical habitat for Threatened and Endangered Species such as the California condor, California bighorn sheep, and the northern spotted owl.



### Water

Almost two-thirds of the freshwater resources in the United States originate from National Forest lands.<sup>20</sup> The estimated value of water flowing from National Forest lands is \$7.2 billion per year from both instream and offstream uses.<sup>21</sup> Surface water run-off in California averages 71 million acre-feet per year. Annual water use is about 37 million acre-feet, of which 80% provides



irrigation to crops throughout the state. National Forests supply 50% of the water in California and form the watershed of most major aqueducts and more than 2,400 reservoirs throughout the state. Major U.S. cities, like Los Angeles, may seem distant from forests, but actually rely on water from National Forest Lands.

### Water Quality Management

The Organic Administration Act of June 4, 1897, that created the National Forest system established as a primary purpose of the forests the "securing of favorable conditions of water flow." In the 113 years since Congress approved that Act, the National Forests in California have generally provided a high level of protection for the headwaters of the state. For example, a recent statewide survey found that streams in

forested watersheds were in better condition than streams in watersheds in any other land use.<sup>22</sup> Water quality of the Sacramento River and its tributaries, which drain primarily National Forest System (NFS) lands, have generally good quality and support their beneficial uses.<sup>23</sup> Sediment and nutrient loads from forested watersheds in the Sierra Nevada, including large areas within National Forests, were substantially lower than loads from downstream agricultural areas and significantly lower than average pollutant loads nationwide.<sup>24</sup>

Nevertheless, resource management and protection activities on NFS lands have potential to result in nonpoint source pollution of the state's waters, and continual efforts to maintain and improve water quality are needed. The USFS nationally has as its goal the ecological restoration of NFS lands.<sup>25</sup> Most recently, the Pacific Southwest Region has developed leadership intent<sup>26</sup> to restore and improve ecosystems on NFS lands in California, and water quality is an important component of forest ecosystems.



Inyo National Forest

Recognizing increasing stresses on the environment, new regulatory developments, and its responsibility for leadership in ecological restoration within the state, the USFS has worked with the State Water Resources Control Board (SWRCB), the RWQCBs, tribes, and stakeholders to develop a draft revised Water Quality Management Plan<sup>27</sup> for NFS lands in California.

The USFS Manual (FSM) directs that BMPs will be used to control nonpoint source pollution related to all management actions with the potential to affect water quality on NFS lands.<sup>28</sup> BMPs are the practices implemented by the USFS to help meet its obligation for compliance with applicable water quality laws and standards, and to maintain and improve water quality. BMPs



Inyo National Forest

address protection of water quality from new and ongoing activities.

Monitoring by the USFS<sup>29</sup> indicates that improved implementation of BMPs is likely to be the most effective approach to improving protection of water quality on NFS lands. Through periodic revision of the WQMP the USFS focuses on developing steps to improve BMP implementation through changes in administrative practices and adaptive management. Based on BMP implementation and

effectiveness monitoring from 2003 to 2007,<sup>29</sup> BMPs for Road Management<sup>30</sup> were reviewed and revised, and new draft BMPs for OHVs (4-7.1 to 4-7.9) are being developed.

All BMPs, including road and trail BMPs, are intended to be dynamic and to undergo periodic review and revisions to ensure they incorporate the best available information and techniques. The BMPs are considered to be performance standards. They are neither detailed prescriptions nor solutions to specific non-point pollution sources. Rather, they are action-initiating mecha-

nisms, processes, and practices that call for the development of site-specific detailed prescriptions designed at the project scale during planning.

The BMPs are dynamic and always subject to improvement and development. Monitoring and evaluation of existing practices may disclose areas where refinement is warranted. Research, academia, and administrative studies are continually evolving new methods and techniques applicable to water quality protection.



Los Padres National Forest

### **OHV and OSV Recreation**

There are approximately 45,000 miles of roads, 5,500 miles of motorized trails, and 1,800 miles of groomed snowmobile trails on NFS Lands within the state available for OHV and OSV recreation opportunity. Approximately 5 million acres of National Forest congressionally designated as Wilderness Areas are closed to OHV use. In addition, there are administratively closed areas that prohibit OHV use for the protection of wildlife, soils, water quality, archaeological and historic resources, rare plants and, other resources.



NFS Trails are managed to provide a high-quality recreation experience and prevent or minimize adverse effects to natural

resources. As part of this management, the Pacific Southwest Region has developed a Soil Conservation Plan to help the USFS meet the Division's Grants Program requirements for soil conservation for specific projects where ground disturbing activities are proposed and for which



Tahoe National Forest

funding is requested. The goal of each National Forest Soil Conservation Plan is to demonstrate how the 2008 Soil Conservation Standard is being met or will be met in state funded project areas. Protocol for assessment, maintenance, and monitoring are identified in the Plan and help guide field staff to tailor the Plan to the needs of the trail system in their area. The trails are assessed and conditions surveyed using the USFS TRACS system (Trail Assessment and Condition Surveys) which is a national protocol requirement. Maintenance activities are con-

ducted based on the Trail Management Objective (TMO) which contains the fundamental information for each trail. The fundamentals are trail type, trail class, designed use, managed use, and design parameters. Based on TMO information, TRAC survey information, and monitoring, staff has the ability to diagnose potential erosion problems and develop maintenance prescrip-

tions to take proactive or corrective action associated with potential soil loss or erosion. Each of the design parameters are implemented using the USFS Trail Management Handbook<sup>31</sup>. Monitoring includes the use of the G-Y-R checklist, photo-point monitoring, or other observational and technical methods and includes documentation of the requirements specified in the Plan for the purposes of determining future needs, effective implementation, and fiscal accountability.



Eldorado National Forest

### **Cooperative Agreements**

Dating back to the 1980s, the Pacific Southwest Region (commonly referred to as Region 5), the Division, and the Commission have maintained a long-standing relationship through the Division's Grants Program.

Between 2004 and 2009 the USFS received \$38.4 million from the Grants Program in the categories of Trail and Facility Maintenance, Conservation, Law Enforcement, Restoration, Planning and Route Inventory and Designation activities. With this financial assistance, the USFS has provided managed motor vehicle



recreation to millions of Californians and improved the health and diversity of ecosystems.

**Northern/Klamath Province:** Habitats on the four Northern/Klamath Province forests (Six Rivers, Klamath, Shasta-Trinity, and Mendocino National Forests) are broadly represented by the following tree types: ponderosa pine, eastside mixed conifer, westside mixed conifer, Douglas fir, lodgepole pine, eastside true fir, westside true fir, and hardwoods. In addition, the non-forested



areas share the following vegetation and habitat characteristics: western juniper/big sagebrush/bluebunch wheatgrass, riparian woodlands, oak woodlands and savannah, scrub oak mixed chaparral, ceanothus mixed chaparral, montane shrubland, bitterbrush, montane meadows, alpine grassland, perennial grass glades, wet meadows, wetlands, and aquatic systems (lakes, streams, ponds, and springs). Riparian communities occur around streams, lakes, ponds, wet meadows, springs, and wetlands throughout the area. Terrestrial habitats tend to be the driest in the southern and eastern portions of this area.

**Sierra Nevada:** Habitats on the 11 Sierra Nevada Forests (Modoc, Lassen, Plumas, Tahoe, Humboldt-Toiyabe, Eldorado,

Stanislaus, Sierra, Inyo, and Sequoia National Forests and the Lake

Tahoe Basin Management Unit) vary greatly across the range. Ecosystems present themselves in the landscape as a patchwork of forests, shrublands, rock outcrops, aquatic features (lakes, rivers, and reservoirs), wet and dry meadows, and other vegetation types that form complex mosaics. In the broadest context, vegetation alliances



Stanislaus National Forest



in the Sierra Nevada are both elevation and latitude sensitive and are distinctly different at the lower elevations between the east and west sides of the Sierra Nevada crest. Yellow pine (ponderosa and Jeffery pines), lodgepole-red fir, and subalpine forests are represented on both sides of the divide, and on most National Forests south of the Modoc, although the yellow pine belts on the east and west slope are distinctly different. Alpine vegetation alliances are found where elevations exceed 11,000 to 12,000 feet. On the west side, the lower elevation alliances include chaparral and foothill woodlands (including

mixed evergreen forests) combined with valley grasslands at the lowest points. On the east side, the lowest elevation is occupied by sagebrush scrub with pinyon-juniper woodlands found between the sagebrush and yellow pines. There are virtually no oak woodlands on the east side.

Streams and associated riparian vegetation occur throughout the area, with wet meadows on the eastern slope.

Southern California: The complex interaction of climate, geology, and topography has created an unusually rich array of vegetation types on the four Southern California National Forests (Los Padres, Angeles, San Bernardino, and Cleveland National Forests) that range from dry desert scrub to humid coastal red-





wood for-

Sierra National Forest

ests. Specific habitats of importance include alpine/subalpine, chaparral, coastal sage scrub, desert mountain, desert scrub, Gabbro outcrops, lakes and reservoirs, limestone/carbonate outcrops, lower montane forest, montane conifer forest, montane meadows, Monterey coastal, oak woodland/savanna/ grassland, pebble plain, riparian, serpentine outcrops, and vernal pools.

### **Federal Cultural Resource Management**

When Division grant applicants request funding for ground disturbing activities, potential impacts to cultural resources must be considered. Federal agencies are responsible for identifying

and protecting cultural resources and avoiding unnecessary damage to them. The National Historic Preservation Act (NHPA) provides comprehensive direction to federal agencies about their historic preservation responsibilities, and compels federal agencies to consider the effect of their undertakings on any district, site, building, structure, or object that is included in, or eligible for, inclusion in the National Register of Historic Places. Executive Order 11593, Protection and Enhancement of the Cultural Environment, also includes direction about the identification and consideration of historic properties in federal land



Humbolt-Toiyabe Historic Building Site

management decisions. Several other federal laws direct federal agency protection and management of cultural resources, including resources that are of state or local significance.

The USFS and the BLM work under a MOU with the California State Historic Preservation Officer to protect cultural resources and sites across public lands.

Specific to the USFS, the 2005 Travel Management Rule<sup>32</sup> also requires that the effects on cultural resources be considered, with the objective of minimizing damage, when designating roads,



Historic Ballarat Ghost Town

trails, and areas for motor vehicle use on NFS lands.

The Grants Program provides important funding for federal agencies to implement cultural resource management and protection projects.

There are challenges inherent in managing use in designated OHV areas where cultural resources are also present. Maintaining cultural resources can best be accomplished by first locating and inventorying cultural sites, and then implementing specific protection measures. Effective measures to reduce

the risk of adverse effects to cultural resources,

including annual monitoring, have been developed to help ensure that resources receive the highest levels of protection possible.

### **BLM Cultural Resource Conditions**

From the start of the 2004 Grants Program year, through the end of the grants issued in 2009, BLM received almost \$527,000 in grants for management of cultural resources. A majority of the cultural resource funding provided during this period (\$307,800) has been utilized by the Archaeological Site Stewardship Program. Similar to the CASSP, this statewide program is a partnership between BLM, USFS, California



Historic Ballarat Ghost Town

State Parks, and the Society for California



Bishop Field Office

Archeology to train and utilize volunteer site stewards. These volunteers adopt specific cultural resource sites and work with agency archaeologists to monitor and stabilize these sites.

An additional \$219,000 has been used to fund specific cultural resource surveys in Ridgecrest and throughout the California Desert District. An example of a grant funded project to manage cultural resources is a project at the Olancha Dunes OHV Open Area, within the BLM Ridgecrest Field Office. The grant was to conduct a sample inventory of cultural artifacts and conduct an ethnographic study of Native American use of the area involving Paiute and Shoshone people.

### **USFS Cultural Resource Conditions**

Many designated OHV areas on USFS lands have conducted cultural resource surveys (e.g., Cleveland and Angeles National Forests). Many of the recorded cultural resource sites within these designated OHV areas and trails are monitored annually to ensure protection measures continue to be effective.<sup>33</sup> Although few National Forests in California have completed entire cultural resource inventories of all motorized recreation trails, the Mendocino National Forest has completely inventoried its designated OHV system of trails.

When impacts to cultural sites are noted, or sites are affected by encroachment off designated system trails, new protective measures are implemented. Region 5 has used regional programmatic agreements for NHPA Section 106 compliance to help manage OHV system uses and provide needed protection to cultural resource sites.

Several forests in Region 5 have effectively implemented site protection measures since 2004. For example, since 2004 more than nine miles of barriers and fences have been installed in the Corral Canyon OHV area on the Cleveland National Forest to confine OHV use to authorized roads and trails and to protect numerous prehistoric archaeological sites in the area. The overall condition of cultural resource sites in the Corral Canyon OHV area ranges from fair to excellent.



Corral Canyon National Forest

In 2006, Region 5 entered into a separate programmatic agreement with the California State Historic Preservation Officer and the Advisory Council on Historic Preservation regarding NHPA Section 106 compliance for motorized recreation projects. This agreement includes a variety of management measures that can be implemented to protect cultural resource sites from the effects of OHV use (e.g., barriers, reroutes, fencing, signs, and closures). Long-term monitoring on the Mendocino National Forest, for example, indicates that most cultural resource sites are in fair to excellent condition and are rarely affected by OHV uses.



Past protection efforts in the Rowher Flat OHV Area have concentrated on placing fencing and pipe-cable barriers to exclude traffic and protect significant cultural resource sites. Monitoring in 2007 involved inspection of 12 archaeological sites considered potentially susceptible to effects from OHV-related activities. This monitoring revealed that a number of archaeological sites were being impacted, primarily from OHV intrusion into archaeological sites by circumventing fenced areas, causing soil disturbance and displacement and breakage of cultural materi-

als. A wildfire that burned through the OHV areas in 2007 caused increased risks to cultural resources resulting from the burning of all barrier vegetation within Rowher Flat and damaged fencing at several places in both Rowher and Drinkwater Flats. Monitoring at 54 cultural resource sites in 2008 showed several archaeological sites, particularly within the Rowher Flat OHV Area, continued to be at-risk from OHV access through the sites. Based upon this monitoring, additional protective measures similar to those implemented in the past were recommended to protect cultural resources, including placement of sturdy cable barriers and fences to prevent further trespass and replacement of damaged barriers and fencing. Directive signage was also suggested as a means to inform the OHV-using public.



### **Local Agencies Receiving OHMVR Grant Funding**

Since the early 1970s, the Division has been working with cities and counties throughout California to manage OHV recreation and provide sustainable OHV recreational opportunities in their areas. The Division has been coordinating with these local agencies to provide balanced

recreational use and prevent environmental damage. Working with local agencies, trespass and resource damage can be effectively reduced by providing a comprehensive program which includes local, legal places for people to recreate; education regarding responsible OHV recreation; and consistent enforcement by law enforcement personnel.

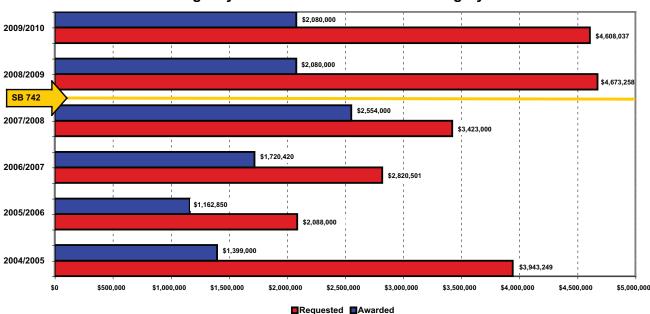


An integral part of the Division's Program is its relationship with local law enforcement organizations. The

Metcalf Motorcycle Park

Division's Grants Program has provided substantial funding to law enforcement agencies around the state to educate the public regarding safe and appropriate OHV recreation, and enforce OHV-related laws.

In addition to financial assistance, the Division provides training to many local entities regarding OHV specific laws and enforcement issues. Training includes testing procedures and enforcement of noise requirements, as well as updates on applicable statutes and codes. The Division also directly supports efforts to reduce OHV trespass and participates with local law enforcement entities in focused enforcement activities throughout the state.



Local Agency Law Enforcement Grant Funding By Fiscal Year

#### **Recreation and Education**

The diversity of OHV opportunities provided by local governments in California is wide-ranging, from small facilities with highly concentrated use (e.g., tracks), to large natural areas with more dispersed trail systems.

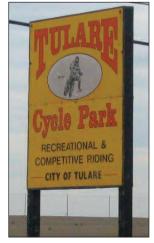


Porterville OHV Park

At one end of the spectrum are the recreational experiences found in local motocross parks. These public facilities, in small- to medium-sized communities like Marysville, Porterville, and Tulare, are fenced and have a relatively small footprint (less than 60 acres). The compact nature of these parks lends itself to day use and special events. Venues of this type usually include one or more groomed tracks that primarily serve motorcycle and ATV

recreationists and offer minimal additional amenities such as bleachers and restrooms. These parks are often located near the periphery of the communities they serve.

Tulare Cycle Park provides a typical example of this kind of facility. This park is a 20-acre, fully enclosed facility adjacent to the wastewater treatment plant and agricultural fields of Tulare County. The facility offers three different groomed and maintained tracks to satisfy the diverse experience levels of park visitors. The facility addresses the needs of the community by providing regular public access, as well as hosting numerous special events throughout the year. Limited amenities include restrooms, parking, and bleacher seating for spectators.



Grant funding helps Tulare Cycle Park provide a safe, clean, and wellmaintained facility for OHV recreationists. Regular maintenance activi-



Tulare Cycle Park

ties such as disking, grooming, and watering of the dirt tracks help control dust and conserve soil.

Falling in the middle of the spectrum are county-operated OHV parks such as Frank Raines Regional Off-Highway Vehicle Park and LaGrange Regional Park in Stanislaus County, Motorcycle County Park in Santa Clara County, and the OHV recreation opportunities provided in California

City. These parks and opportunities are larger in size, ranging from 150 acres to several thousand acres, and offer a wider variety of OHV recreational opportunities than the smaller parks described above. Financial assistance through the Grants Program provides staffing for law enforcement, as well as maintenance of trails and facilities.



Stanislaus County maintains two OHV parks—Frank Raines and LaGrange. Frank Raines is located 18 miles west of the city of Patterson. There are approximately 750 acres in the lower OHV Park which include a campground, RV hook ups, a recreation hall, restrooms/showers, and a group picnic area. The bridge used to access the park was damaged and has been replaced. Additionally, several important improvements to culverts have been completed, which resulted in improved water flow and reduced erosion.

Frank Raines

On the other hand, La Grange is a small, 147-acre, facility that was a quarry before it became a

park. The park contains open trail riding, as well as a motocross track. Past funding to Stanislaus County has also been used to repair wells that provide drinking water, sanitation, irrigation, and track maintenance.



Another illustration of the mid-size OHV opportunity provided by local agencies is Santa Clara's Motorcycle County Park,

also known as Metcalf Motorcycle Park, which is a 459-acre facility located approximately 20 minutes south of San Jose. Given the park's proximity to one of the largest metropolitan centers in the state, it is not unusual for the park to operate at full capacity throughout the riding season.



Metcalf Motorcycle Park

To meet the growing recreational needs of the OHV community, Motorcycle County Park offers over 20 miles of dirt trails for motorcycle and ATV enthusiasts of all skill levels. In addition, the park contains motocross and Quarter Midget tracks, picnic areas, and restroom facilities.

Santa Clara County has a strong commitment to protecting the natural environment at Motorcycle County Park. The visitor center

maintains interpretive displays about the flora and fauna of the park and interpretive talks are regularly conducted on-site. The park has developed a very popular, six-week Junior Ranger

OHV program for young riders. The objective is to teach the next generation of OHV enthusiasts safe riding techniques and rider etiquette through educational presentations and hands-on instruction.





Metcalf Motorcycle Park

In 2007, Metcalf was visited by the California Biodiversity Council. The two-day conference highlighted resource management issues at OHV recreation facilities. The Council gained a new understanding of the role of well managed OHV recreation areas in maintaining open space and supporting biological diversity, and was very

complimentary to the park and staff regarding their commitment to resource protection.

Assistance provided through the Grants Program allows the County to maintain trails, signage and fences, clear culverts, clean out silt basins, and when appropriate, close damaged areas for repair or restoration. The County has also implemented soil monitoring in accordance with the 2008 Soil Conservation Standard; grant funding also supports the very popular education efforts.



Lupine Blue Butterfly

At the other end of the spectrum from a local city or county park is the remote and challenging OHV opportunity provided by El Dorado County on the Rubicon Trail. The world famous Rubicon Trail is located in the Sierra Nevada approximately 80 miles east of Sacramento. This 22-mile trail is a non-maintained county road that travels through El Dorado and Placer Counties, as well as the Eldorado and Tahoe National Forests,

and the Lake Tahoe Basin Management Unit, and across some privately-owned properties. The western 12-mile portion of the Rubicon Trail is managed by the El Dorado County Department of Transportation. Once a month, the County hosts a stakeholder group (Rubicon Oversight Committee (ROC)) to facilitate public input on decisions concerning management of the trail.

Rubicon Trail

In 2009, Eldorado County received a Cleanup and Abatement Order (CAO) from the Central Valley

RWQCB. The CAO charged that portions of the trail were discharging excessive amounts of sediment to the waters of the state. Failure to comply with the improvements to reduce sediment discharge as required by the CAO would result in substantial fines to El Dorado County and possible closure of the Trail.

Nearly a year before the issuance of the CAO, the Division, in cooperation with the County, had initiated a trail assessment using the expertise of the CGS. Using GPS receivers and GIS technology, areas with poor trail design and acute erosion were identified and loaded into a database. Digital photos and text document, and regional geology and soils coverage for the area, were also included. The assessment has become an essential tool as the County has proceeded with designing and implementing solutions for repairing problem areas and improving conditions on the Trail.

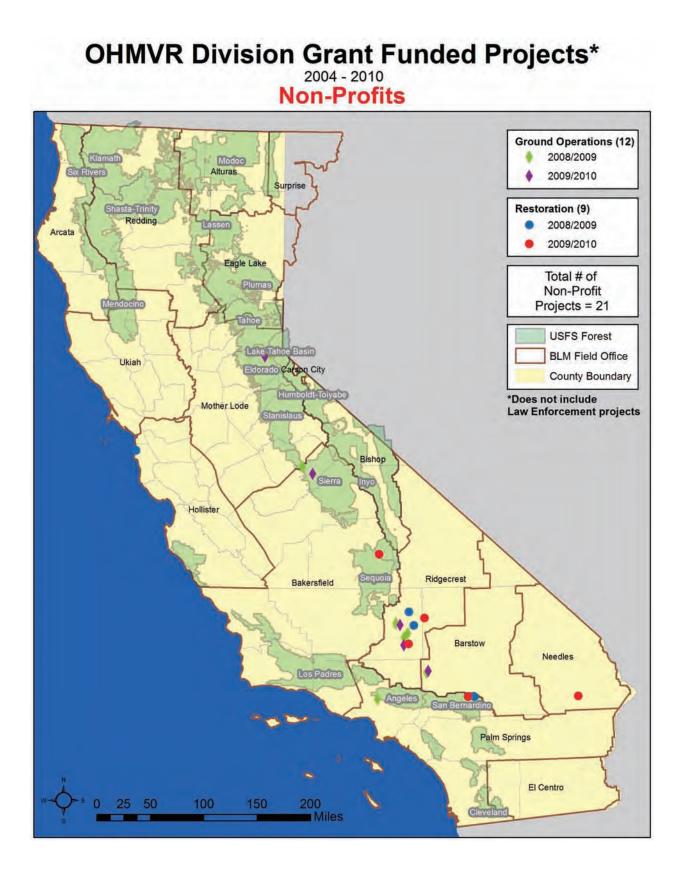
To assist with management of the Rubicon Trail, El Dorado County has secured Grants Program funding for installation of erosion control structures, trail tread armoring, restroom installation and restoration of damaged habitat. The Rubicon Trail Foundation (RTF), a key nonprofit organization, along with the Friends of the Rubicon, provide thousands of hours of work on the trail on behalf of the County. RTF has also secured Grants Program funding for land stewardship education, trail sanitation, visitor use surveys, and trail signage.



The County has also launched an extensive outreach effort, distributing educational and informational materials promoting responsible use on the Trail. The El Dorado County Sheriff's Department has also received Grants Program funding for law enforcement efforts on the Rubicon Trail. (More details regarding law enforcement efforts on the Rubicon Trail may be found under Report Requirement No. 5 on page 192.)



Significant progress has been made by El Dorado County to address issues related to water quality, sanitation, soil erosion, and cleanup of fluid spills. Through cooperation and collaboration of all interested parties, improvements will continue to ensure long-term sustainability.

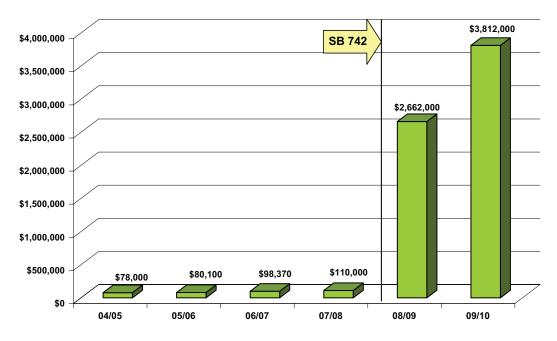


# Nonprofit Organizations Receiving OHMVR Grant Funding

Volunteers working on public lands are an integral part of the success of the various federal, state, and local OHV programs. On average, thousands of hours annually have been logged by volunteers in support of conservation and land management efforts.<sup>34</sup>

A growing number of nonprofit organizations are key partners with various public land managers working together to provide stewardship and long-term sustainability of the state's recreational opportunity and resources.

Since the inception of the Grants Program in 1974, nonprofit organizations have been able to apply for education and safety grants projects. The enactment of SB 742 in 2008 for the first time allowed nonprofits to apply for trail maintenance and restoration projects. This change has resulted in nonprofit organizations receiving significantly higher levels of grant funding, as seen in the chart below:



# **Grant Funds Awarded to NonProfits**

To ensure nonprofit organizations work collaboratively with public land managers when submitting project proposals, Grants Program Regulations require educational and nonprofit organizations applying for grants involving activities on any public lands to include a written agreement with their application from the land manager authorizing the applicant to conduct the proposed project and providing a description of how the project helps achieve the land management goals of the area.

Important activities provided by the nonprofit organizations include:

- Cleaning drainage structures such as culverts, dips, and lead off ditches; armoring stream crossings; placing rock riprap; blocking unauthorized routes; removing downed trees and boulders from roadways; repairing and installing road and directional signs; performing condition surveys; reporting unsafe road conditions; and removing trash.
- Signing and, where appropriate, fencing non-motorized areas.
- Repairing OHV damage associated with illegal hill climbs, stabilizing soils, and preventing erosion.

In an era of shrinking budgets, staffing reductions, and competing priorities, land managers are looking to their nonprofit partners for assistance. The Division anticipates these important partnerships will continue to be a critical component to the long-term success of OHV recreation management.

The following are some examples of partnerships between nonprofit organizations and public land managers:

### Jawbone OHV Recreation Area

The Jawbone OHV Recreation Area is located approximately 20 miles north of the town of Mojave, along California Highway 14. The Jawbone OHV Recreation Area is within the Mojave Desert on the extreme eastern edge of the Sierra Nevada.

The Jawbone OHV Recreation Area comprises 7,000 acres of open use public land and is a popular destination for OHV recreationists. The Jawbone OHV Recreation Area is managed by the BLM Ridgecrest Field Office, which partners with nonprofit organizations in managing its OHV



Jawbone restoration

program in an effort to provide for long-term sustainability and protection of the area's cultural and natural resources.

Key activities conducted by nonprofit organizations within the Jawbone OHV Recreation Area include:

- Maintaining facilities such as trails, roads, signs, kiosks, fences, restrooms, and vehicle barriers
- Informational signing and outreach

- Providing public information, emergency services, and visitor contacts for voluntary compliance with the rules and regulations
- Installing barriers to prevent trespass into closed areas
- Photo documentation and data collection to assess the effectiveness of restoration projects

During the 2008/09 grant cycle, a total of \$379,000 in grant funds was awarded to nonprofit organizations for ground operations activities within the Jawbone area. Additionally, a total of \$481,000 was awarded to nonprofit organizations within the Jawbone area for restoration activities. During



Maintenance on the Trails

the 2009/10 grant cycle, nonprofit organizations were awarded \$480,000 in grant funds for ground operations activities and \$2,052,000 in grant funds for restoration activities within the Jawbone area.

#### Mori Point

Mori Point is a 110-acre site located in Pacifica, south of San Francisco. In 2000, Mori Point was purchased by various land trusts and conservancies and donated to the Golden Gate National Recreation Area.



Accelerated soil erosion from past OHV use was depositing soil and sediment into the Pacific Ocean. Sediment was flowing into sensitive areas, such as wetlands, which support two federally-listed species.

In the 2008/09 grant cycle, a \$1 million grant was awarded for restoration activities within Mori Point.

The project will revitalize and expand freshwater wetland habitat and reestablish habitat connectivity. The project will also restore natural drainage and expand ponds and wetlands.



# **Resolution of Conflicts of Use**

The population of California has nearly doubled since the OHMVR Program was created in 1971. Today, more and more people area heading to rural areas in search of OHV recreational opportunities. At the same time, areas traditionally available for OHV recreation have been shrinking due to reallocation of land uses as people relocate from urban communities, and land management agencies embark upon

the designation of motorized routes. This is creating a situation where competition for resources leads to land use conflicts. The clash between OHV enthusiasts and those who oppose OHV recreation near their homes and communities ranges from small disagreements to outright hostility, and in a relatively small number of extreme cases, violence.

However, in some instances communities of interest (homeowner associations, nonprofits, OHV recreation communities) are working together to solve these conflicts. The Commission and Division have taken an active interest in reducing land use conflicts. Efforts range from general education and outreach, to specific conflict resolution and focused enforcement efforts. All too often, there seems to be a lack of knowledge and understanding about where and when motorized use is allowed on public lands. In recent years, to address these issues, the Division has acted to:

- Provide information on the Division website about OHV Laws and a Frequently Asked Questions page specific to OHV use
- Create a process where members of the public can direct comments and questions directly to the Division (ohvinfo@parks.ca.gov) or to the Commission (OHVcommission@parks. ca.gov) regarding OHV recreation, and receive responses from Division and Commission staff
- Develop an OHV quick reference handbook for law enforcement officers statewide
- Work with local, state, and federal law enforcement organizations on education and enforcement efforts
- Increase presence and participation at community outreach events to educate the public about the OHMVR Program and to learn their concerns
- Educate private property owners on steps to take to reduce illegal OHV use on their lands
- Provide funding for conflict resolution facilitation efforts throughout the state
- Provide technical assistance to local counties considering ordinances related to recreational OHV use
- Provide information to interested communities about the OHMVR Program and the funding available for projects in their area

In concert with the OHMVR mission to provide statewide leadership, there are several instances where the Division has facilitated outreach efforts to address issues of land use conflict. The Division will continue to work with communities and organizations who are interested in conflict resolution and consensus building. It will also continue to work with local, state, and federal law enforcement. At the foundation of these efforts is the belief that citizens care deeply about their public lands, and although it may be difficult at times, they also welcome the opportunity to engage one another productively and safely, to learn the concerns of other communities of interest, and to have others hear and appreciate their own concerns. A few examples of the Division efforts include:

#### **INYO NATIONAL FOREST**

In 2008, local stakeholders were in conflict regarding decisions under consideration which would affect the USFS Travel Management Process in the Inyo National Forest. The Division requested the services of the Center for Collaborative Policy to facilitate a local stakeholder discussion working through the difficult issues.

With 5,000 individually numbered routes making up a network of 3,700 miles of route, arriving at a sustainable and manageable system of roads, trails and areas for motorized use across lands managed by the Inyo National Forest presented a significant challenge. A broad group of local stakeholders were brought together in March. Participants were promised that, if they were able to agree on an alternative, the Forest Service would give it serious consideration through the National Environmental Policy Act (NEPA) process. The "Travel Management Collaborative



Alternative Team" (CAT) met intensively over a two month period to determine if there were mutually acceptable options for trail routes on the Inyo National Forest that would provide for safe and environmentally responsible use. With professional facilitation provided by the Center for Collaborative Policy (made possible through a contract with the Division), the CAT was successful in their effort. A slightly revised version of their proposal was implemented by the Inyo National Forest and the decision was not appealed by any of the involved parties. One of the participants noted that the CAT was successful because they agreed that "it's not about winning or losing, but about the need to create a system that protects land and satisfies everyone's needs." Another participant observed this experience demonstrates that when stakeholders are brought together, they are likely to be successful.



Travel Management Collaborative Alternative Team

Left to Right: First Row (kneeling): Bryce Wheeler (Sierra Club), Austin McInerny (Facilitator), Allan Pietrasanta (Facilitator), Brian Hamilton (Mammoth Lakes/Eastern Sierra 4WD Club), Dan Jacobs (Advocates for Access to Public Lands) Second Row: Danna Stroud (City of Mammoth Lakes), Susan Cash (Inyo County Supervisor), John Stewart (Cal 4X4) Third Row: Doug Thompson (Resource Conservation & Development Council), Linda Arcularius (Inyo County Supervisor), James Wilson (Audubon) Back Row: Dick Noles (Advocates for Access to Public Lands), Jon Patzer (Mammoth Lakes/Eastern Sierra 4WD Club), Earlene Beaver (Mammoth Lakes/Eastern Sierra 4WD Club), Bill Sauser (Mammoth Lakes. Snowmobile Association), Ron Schiller (High Desert Multiple Use Coalition), Greg Weirick (Advocates for Access to Public Lands), Marty Fortney (Owner, Aberdeen Resort), Paul McFarland (Friends of the Inyo), Frank Stewart (Friends of the Inyo), Doug Brown (Advocates for Access to Public Lands)

#### PACIFIC CREST TRAIL

In the spring of 2010, the Division public safety team was contacted by a number of individuals and agencies with concerns about reported trespass by dirt bikes along the Pacific Crest Trail (PCT), in and around the Tehachapi Mountains.

The Division contacted the BLM, USFS, and Kern County regarding these reports and offered its assistance to address the situation. Subsequent site visits by Division state park rangers revealed that trespass into closed areas, as well as on private property was occurring. Over the following weeks agencies met with one another and local community groups to coordinate education and law enforcement approaches.

Law enforcement efforts were highlighted over the Easter holiday, when law enforcement personnel from the Kern County Sheriff's Office, Division, USFS, and the BLM conducted a joint law enforcement effort targeting illegal OHV activity on the PCT and on private property. Their efforts were successful as they resulted in the apprehension of three riders along the PCT.

Despite the success of this law enforcement effort, there continues to be reports of trespass in this area. Resolution of this ongoing issue will require sustained effort, clear signage, and aggressive enforcement to achieve tangible, long-term solutions.



#### **HOPE VALLEY**

Hope Valley, located in the Sierra Nevada just south of Lake Tahoe, is an area surrounded by high peaks, beautiful meadows, and stunning vistas. Those who live in the area and those who visit Hope Valley are passionate about the land and how it is managed. With various ideologies and viewpoints, getting a disparate group of people to agree on an approach to winter travel and use in Hope Valley seemed virtually impossible. The Division believed it was essential to get people together to initiate a dialogue to see if consensus on the issues could be achieved. Given the groups' shared passion for



Hope Valley, the Division believed there was a strong potential for finding common ground and agreement. The Division reached out to the Center for Collaborative Policy for assistance.

Representatives from the USFS, Alpine County, local friends groups, and various motorized and non-motorized groups came together to discuss issues regarding appropriate access to public lands. Cross-country skiers wanted to ski without the sound and smell of snowmobiles. Snowmobilers wanted access to closed lands outside of wilderness areas. Over time, initial disagreement and polarization was replaced by understanding and agreement. At the end of the process, a set of recommenda-

tions, and a series of steps to address use conflicts was presented to the USFS for incorporation into the winter management plan.

#### WONDER VALLEY

In December 2008, the Commission and Division received letters and emails from a number of residents of Wonder Valley, located in unincorporated San Bernardino County, describing OHV conflicts and private property trespass. The area is a desert landscape with a system of dirt roads. Most private property is not fenced or signed. The authorized BLM OHV routes are generally not signed.

Throughout 2009, the Division public safety team met with local residents, representatives from BLM, San Bernardino County Sheriff's Department, County Code enforcement, and CHP in an effort to improve communication and initiate collaboration amongst the local residents as well as law enforcement agencies. On several occasions, state park rangers from the Division assisted by providing public safety coverage and patrol.

Irrespective of whether local residents are OHV enthusiasts or opposed to OHV recreation, all parties have expressed appreciation for the Division's efforts to help educate residents and visitors about appropriate OHV use, and their efforts to reduce conflict in the area.

#### FOLSOM LAKE STATE RECREATION AREA

In 2009, a horse was severely injured, and had to be destroyed after being spooked by dirt bikes operating illegally at Folsom Lake State Recreation Area. The incident shocked the motorized and non-motorized communities alike. Working under the facilitation of Americans for Responsible Recreational Access, a group came together and worked cooperatively to develop a strategy to improve relationships and improve trail-sharing techniques between equestrian, OHV, mountain biking, and hiking groups on a local, state, and national level. The Division was an active



participant in suggesting corrective actions, educational efforts, and other activities to direct OHV recreation to appropriate areas. The commitment of the group to this project was unwavering. In a short period of time, the groups produced: Sharing Our Trails – A Guide to Trail Etiquette. The guide represents the efforts of a broad range of trail enthusiasts working together to develop an understanding and respect of each other's needs, and a guide that specifically tells trail enthusiasts what steps to take when they meet on the trail to minimize use conflict, increase safety, and enhance enjoyment of our public recreation opportunities.

#### **ROUND VALLEY SNO-PARK**

With the growing popularity and demand for diverse winter recreation opportunities, many SNO-PARK areas in California are becoming increasingly populated. In large part, people are satisfied and continue to return to the SNO-PARKs year after year; however, conflicts can and do occur as a result

of growth and congestion, and if not addressed conflicts may elevate. With this in mind, a primary objective of the Program is to identify and address trail conflicts and promote collaborative trail solutions.

In 2007, a Commissioner expressed concerns about increasing congestion and potential conflicts at the Lake Alpine and Spicer SNO-PARKs located in the Stanislaus National Forest, along Highway 4. During the winter months the parking lots often fill to capacity leading to conflicts between trail users



due to shortage of parking areas. Consequently, people are forced to find parking outside the SNO-PARKs and instead park along the highway, which creates significant safety concerns.



To minimize parking congestion and the potential for conflicts, a new staging area is being developed by the Division. Round Valley will be the state's newest SNO-PARK scheduled for completion in 2011. Nonmotorized enthusiasts will be able to enjoy this parking lot during the winter months, while the motorized community will be able to use it as a staging area during the summer months.

This project sets an example of how the Commission, the Division, the Stanislaus National Forest, and the motorized and non-motorized communities can work together to resolve conflicts and promote trail sharing through mutually beneficial solutions.

### **REPORT REQUIREMENT NO. 3**

The status and accomplishments of funds appropriated for restoration pursuant to Section 5090.50(b)(2) – Grants and Cooperative Agreements.

# **Overview**

Restoration of lands which cannot be maintained to appropriate standards, and restoring lands which have been damaged by illegal use, are essential activities in preventing accelerated erosion and ensuring lands are managed for long-term sustainability.

Since 2004, approximately \$35 million of OHV Trust Funds have been awarded to eligible entities to fund restoration activities throughout the State of California. In the FY 2009/10 alone, over \$7 million was awarded to grant applicants including the BLM, USFS, counties, nonprofit organizations, and districts.

# **Legislative Changes**

SB 742, which went into effect in 2008, changed the language in PRC Section 5090.50 (b)(2)(A) to provide for:

- Consistent Funding: In past years, the amount of grant funding directed to restoration efforts was set by the Commission each year. In order to provide consistent and stable funding, SB 742 established that 25% of funds appropriated by the Legislature for the Grants Program be allocated for restoration projects.
- Appropriate Use of Restoration Funds: SB 742 expanded and clarified the appropriate use of restoration funds to encompass projects that provide ecological restoration or repair to habitat damaged by legal or illegal OHV use.

# **Conservation and Enforcement Services Account**

When SB 742 was enacted, it included changes to the CESA described in Revenue and Taxation Code (RTC) Section 8352.8 which had previously dedicated a percentage of fuel tax revenues to restoration. As a result of the changes, no new funds are deposited into the CESA. The funds remaining in the CESA are to be spent until they are depleted. Up to 40% of the monies may be

used for completion of route designation planning and implementation; the remainder is to be made available to increase restoration grant funding by up to \$1.1 million per grants cycle.

# **Restoration in BLM and USFS Areas**

Through financial assistance to federal agencies for restoration projects, significant results have been achieved in repairing and restoring lands that have been impacted by OHV use.

### **BLM Restoration**

With strong support from the Division, since 2004 the BLM has received approximately \$18 million for restoration of non-designated OHV trails and damaged lands. The BLM focuses most intensively on lands in the Mojave and Sonoran Deserts.

Restoration has accelerated the process of reconnecting fragmented desert vegetation and has set the stage for recovering blocks of uninterrupted habitat for threatened and endangered species such as desert tortoise and Mohave ground squirrel, and for BLM sensitive species such as the flat-tailed horned lizard.

The principal strategy for vegetation restoration and habitat enhancement has been to create conditions on the ground that redirect OHV recreation away from unauthorized OHV trails and areas so that natural desert ecosystems can initiate the process of recovering vegetation communities and habitat continuity impacted by OHV recreation.



Desert techniques generally involve:

- Vertical mulching to create a visual barrier of dead and down vegetation to the line of sight that disguises a former trail and/or make use of rock work and fencing to create a physical barrier
- Texturing the bare soil with small pits which are then filled with seeds found in the plant litter beneath nearby shrubs. These pits act as rainfall traps that concentrate water to the seeds at the bottom of the pit and give seeds a more favorable microsite for germination

Significant projects underway are: fencing the wildlife-rich Dos Palmas ACEC near Indio; landscape restoration for the hyperarid Yuha Desert near El Centro; and rehabilitation of vehicle damage in the Alabama Hills, a popular scenic recreation destination in the Owens Valley. Restoration crews patrol the boundaries of all 67 BLM desert wildernesses and secure wilderness boundaries



#### **ALABAMA HILLS**

An example of a project that received a national award is the Alabama Hills restoration project completed by the BLM Bishop Field Office. The project involved the realignment and restriction of parking areas; closed motorized "challenge" areas; restored habitat damaged by irresponsible and illegal OHV use; developed and printed maps, rules and regulations; and monitored restored impacted areas. The OHV Trust Fund contributed \$120,000 to this project.

This project was a partnership effort between the BLM Bishop Field Office and the Alabama Hills Stewardship Group, a local community group. In recognition of outstanding conservation achievements attained through collaboration and partnership with others, the BLM Bishop Field Office and the Alabama Hills Stewardship Group received the United States Department of Interior Cooperative Conservation Award. The award recognizes cooperative conservation achievements that involve collaborative activity among a diverse range of entities that may include federal, state, local and tribal governments, private for-profit and nonprofit institutions, other non-governmental entities, and individuals.



by mending fences, disguising old mining roads, and creating needed parking areas for OHV recreationists at wilderness edges.



An important change to the Grants Program provided funding for nonprofits for restoration and trail maintenance. In 2009, Friends of Jawbone took advantage of this opportunity and applied for and received a grant for restoration work on BLM land in the Jawbone-Butterbredt ACEC, near California City, in Kern County. BLM will continue to expand its partnerships with Friends of Jawbone and other OHV clubs and advocacy groups who share a concern for land stewardship and responsible use.

Monitoring restoration projects is a key element for evaluating the success of various restoration techniques and engaging in adaptive management to adjust approaches to restoration as needed. The BLM California Desert District has established a uniform protocol to document the installation of restoration projects so that a historic

record of baseline conditions is available for evaluating future work. Following initial restoration actions, the project managers, park rangers, and law enforcement officers check on restoration sites at least quarterly. If storm erosion, inadequate vegetation taking hold, or illegal riding cause the site to depart from desired conditions, the restoration project managers can respond quickly with remedial treatments. Both site photography and quantitative monitoring of vegetation cover and species composition take place every year for at least five years.



Black Mountain Restoration

The BLM has also been the beneficiary of grants that help agency restoration ecologists conduct adaptive management testing with new techniques in restoration methods

and review past results of restoration projects. Two major projects have been completed: (1) experi-

mental restoration trails on

serpentine (magnesium-rich) barrens and adjacent serpentine riparian areas in the Inner Coast Range; and



Black Mountain Restoration

(2) a retrospective view of rates of natural and facilitated regeneration

along the Los Angeles Aqueduct. Currently, the staffs of the BLM Needles and Lake Havasu Field Offices are collaborating on restoration methods to jumpstart regeneration of saguaros in OHV riding areas in eastern San Bernardino County, one of two sites where saguaros still occurs in California.

#### **USFS Restoration**

Improving and restoring the health of its watersheds and ecosystems is a national priority for the USFS, which typically implements two types of restoration: passive and active. Passive restoration methods can include blocking routes, such as with boulders, or vertical mulching, where native plant materials are placed throughout the route to "disguise" it and allow natural revegeta-



tion. In active restoration projects, ground-disturbing activities such as "ripping" or scarifying the ground make the route impassible. Culverts and other engineered structures are removed and in some instances, seeding and planting strategies combined with noxious weed abatement activities are implemented.

Since 2004, the USFS received approximately \$11.4 million in restoration funding through the Grants Program to address habitat fragmentation or degradation, hill climbs, and illegal use in meadows and other sensitive areas. During this time, most of the 18

National Forests in California had at least one major restoration project, and several forests had multiple projects. In many cases, the forests leveraged OHV Trust Fund dollars with watershed funding resulting in tangible results on the ground, and promoting land stewardship and volunteerism on the forests.

Most of the restoration projects have been in the Six Rivers, Mendocino, Plumas, Tahoe, Sierra, Inyo, Sequoia, Los Padres, Angeles, San Bernardino, and Cleveland National Forests. The typical projects





included hill

climb and illegal route removal, slope and stream bank stabilization, slope recontouring, meadow restoration, fencing, barriers, native plant revegetation, and boulder placement. Monitoring is a key component of restoration projects and is typically accomplished through the resource and recreation OHV programs. Field specialists are frequently on site for the implementation of restoration projects to ensure project success and support any necessary project mitigations. Monitoring has multiple aspects in restoration projects, and monitoring visits have provided quality baseline data for future implementation of projects. The USFS focuses on the "Three E's" methodology (Education, Engineering, and Enforcement) for managing OHV recreation and assuring the success of restoration projects.

- Education efforts include signs, personal contacts and printed information. Through these methods of contact, staff educates the public regarding why it is important to respect project boundaries, and the ways restoration projects benefit the overall health of the system, thus ensuring recreational opportunities be managed for the long term.
- Engineering includes vertical mulching to stabilize restoration sites, and installation of barriers to prevent incursion into restored areas.
- Enforcement actions (contacts and citations, etc.) are another tool leading to increased restoration success in those instances when education and engineering have not proven to be successful in preventing vehicle incursions into restored areas.



Tahoe National Forest Fence Project



Tahoe National Forest Fence Project 2 years later



Glass Creek Restoration, Inyo National Forest



Glass Creek Restoration, Inyo National Forest

## **REPORT REQUIREMENT NO. 4**

A summary of resource monitoring data compiled at the SVRAs, BLM and USFS and a summary of restoration work completed at the SVRAs.

## **Overview**

Monitoring data are essential for understanding and addressing the natural resource condition of an SVRA. Monitoring may provide targeted data, such as determining the presence of specific special-status species, or answer broader questions about species diversity and biological trends. The WHPP, mandated by PRC Section 5090.35, and the HMS developed by the Division are a major part of each SVRA's resource monitoring and evaluation program.

The Division helps guide resource management for the entire SVRA system, and each SVRA's HMS includes standardized protocols tailored for the needs of the particular SVRA. In addition, each SVRA prepared a WHPP, which focused on habitat management, and is supported by the Habitat Monitoring System (HMS).

The goals of the WHPP are to monitor and manage wildlife and plant populations and restore habitats where necessary to sustain a viable species composition for



each area. The data collected through monitoring help answer a range of questions, such as: what habitats need additional protection; where should funds be expended; where should fencing be located to protect sensitive habitats; which habitat types are more resistant to OHV use and which are not; which OHV use patterns are sustainable and which are not? These plans enable adaptive management, allowing management practices and strategies to change, or "adapt," as warranted by the new monitoring information.

Environmental scientists for each SVRA conduct and oversee the monitoring based on the HMS and other monitoring protocols. Environmental scientists monitor wildlife and plants. Since 2004, funding for monitoring has increased. In some instances, park resource staff has increased as well.

## **Monitoring in the SVRAs**

### **Carnegie SVRA – Monitoring**

#### **Species Monitoring**

Surveys of the park's habitat have occurred periodically since 1980. Beginning in 2003 and ending in 2009, the HMS survey protocols were implemented with more consistency than in previous years due to more regular staffing. The focus was on bird species and amphibians, although reptiles and mammals were also sampled. Recently, park staff began implementing new HMS protocols, building on the information collected from the past six years.

During this six year period (2003-2009), bird surveys provided the most readily analyzed data measured at the park. Twice each year, four to six transects were surveyed by two to four State Park ecologists. These transects were loosely divided by habitat type (blue oak, California annual grassland, California sagebrush-black sage, and riparian) and OHV use (open vs. closed).

The analysis for bird species diversity has shown moderate to high levels for the park, in general. Statistical analysis suggested no significant differences existed between riding and non-riding (control) areas.

The aim of the bird survey protocol was to learn more about the species and the habitats they use. From this effort, certain birds were determined to live within specific habitats, while others did not show a preference. As an example, blue oak woodland is among the





Oak Titmouse

park's three distinct habitat types. A majority of the bird observations (>60%, n=291) showed the acorn woodpecker, Lewis's woodpecker, oak titmouse, and white-breasted nuthatch present within this habitat. If a strong correlation does exist with these species and the blue oak woodland, the health of this ecosystem could then be partially measured by the presence of these species. As a result of the first generation HMS dataset, each habitat type now has its own group of indicator bird species which are being analyzed in the 2010 surveys. Discerning this information is crucial to maintaining the park's biodiversity, since the species most affected if that habitat is lost

or becomes less suitable. Therefore, new HMS protocols are focusing on the species that are the most sensitive to change and are unable to survive in a wide range of habitats. Simultaneously,

environmental scientists are measuring trail density and vegetation cover within certain habitats to determine if correlations exist with the indicator species. If so, then clear management directives can be outlined.

Also during the period of 2003-2009, amphibians were measured on an annual basis with the focus on detecting presence of the federally-listed threatened California red-legged frog (the frog) and California tiger salamander (the salamander). The park has 21 ponds, most of which are monitored by park staff twice each year using dip nets and binoculars in order to verify the presence of these species. Since 1995, the average percentage of the park's ponds with frog presence is 36% and salamander presence is 30%. In 2009, seven of the 16 ponds sampled had presence



California Tiger Salamandar

of at least one of these species. The sampling effort has been variable over this time period with an average of 13 ponds sampled each year. Although their presence is highly variable from year to year, a few ponds consistently had frogs and salamanders and appeared to be breeding ponds. While all ponds are managed assuming these species are present, and are therefore restricted from OHV use, these source ponds are considered the most critical to the population's persistence, and greater levels of protection are given (e.g., buffer areas). The amphibians will continue to be sampled using the protocols of the last several years. The biggest hurdle to answering resource management questions has been the loose framework of the first generation HMS study design. The data set is very broad and had been inconsistently implemented to make



Red-legged Frog

inferences on a fine scale. New HMS protocols are designed to address these shortcomings and enable staff to better evaluate population trends and make comparisons between OHV and non-OHV areas by adhering to the appropriate sampling standards and statistical methodology. For instance, instead of using six transects for bird surveys, a very low sample size, over 40 sample sites have been established. Although these protocols will need to be tested over the next few years to ensure adequate sampling occurs, once in place they will be effective at guiding management decisions since they reduce the large amount of

"noise" in the dataset. The components measured in these new protocols are inclusive of vegetation, birds, amphibians, and both small and large mammals. The vegetation, bird, and mammal protocols changed markedly from the original protocols, while the amphibian component will remain consistent as it is currently providing adequate data.

### Trails Management and Restoration

Trail management is one of the highest resource priorities for the park. The park has a network of established trails, although off-trail riding occurs. Off-trail riding is discouraged through the use of fences, education, and enforcement. The soils of these trails are monitored for signs of erosion per the 2008 Soil Conservation Standard.

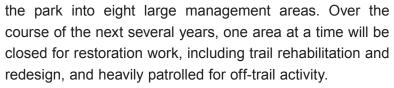
Starting in 2009, over 151 miles of trails were rated based on soil conditions. These ratings are used to identify problem areas and plan restoration projects. As an example, the area known as SRI Loop had 54% (2.5 miles) of trails in need of some level of maintenance based on the soil



SRI Loop Restoration #1

condition evaluations. These trails were restored or eliminated, and the soils were returned to a sustainable rating. Soil evaluations will continue to be conducted on an annual basis.

Also in 2009, the park adopted a new sustainable trail plan strategy. Essentially, park staff has divided





SRI Loop Restoration #2

Due to the steep terrain and dense vegetation, restoration efforts can be difficult. Hand crews often implement the majority of trail work, which includes tooling out large ruts, recontouring trail tread, and installing water control features. Heavy equipment is also used for regular maintenance and larger projects. Significant restoration efforts have greatly enhanced the health of the park's



SRI Loop Restoration #3

ecosystem and the density of habitat. The Rocky Knob project is a great example.



SRI Loop Restoration #4

Rocky Knob is one of the most popular hills in the park. At approximately 1,600 feet in elevation, it is known for its landscape views and unique rock outcrops, but over the past several years this area had become severely eroded. In 2008, park staff developed a plan to restore Rocky Knob. This plan included replacing soil to cover the bedrock, repairing the access road, constructing a sustainable OHV trail, and restoring the gully below. The project was able to utilize soil deposits already on site, found within the sediment basins, to both replace soil and fill the gully. Fencing



Rocky Knob Restoration #1

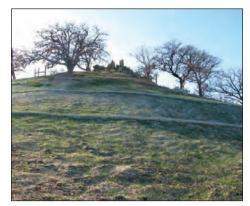
restricts recreational use and allows for vegetation recovery, which was encouraged by hydro-seeding. The new trail connects to other trails and once again allows access to one of the most popular areas in the park.

The results of these efforts have been very positive by greatly reducing erosion, increasing vegetative cover to improve overall

habitat throughout the park, and providing sustainable high quality recreational opportunities for our visitors.



Rocky Knob Restoration #2



Rocky Knob Restoration #3



Rocky Knob Restoration #4

#### **Clay Pit SVRA – Monitoring**

A wetland delineation completed in 2005 located 154 wetlands, including vernal pools. A follow up delineation was conducted in 2008. Together the two delineations identified almost 200 separate wetlands. Surveys of the vernal pools identified various aquatic flowering plants and biota,

including the federally-listed threatened vernal pool fairy shrimp. Additionally, a bird survey and vegetation survey for sensitive plant species have been completed.

Data collected by the DWR, the original property owner, show very little change in the status of the vernal pool and wetland habitat over the past 15 years. Park staff is currently working on obtaining a more comprehensive set of documents from agencies such as the DWR, which would allow them to better track changes.



Until 2010, Clay Pit SVRA was managed by Lake Oroville State Recreation Area, which has different mandates for species monitoring and resource management. Now that the Division has



Killdeer

assumed operational control of the park, park staff has begun implementing the HMS monitoring program. OHMVR staff will be monitoring for species per the HMS protocols, which include birds, aquatic invertebrates, reptiles, plants, and soils. A park General Plan is currently under way and will provide strategies and alternatives for development, management, and restoration activities, along with guidance from regulatory agencies.

### Hollister Hills SVRA – Monitoring

In a progressive approach to the HMS program, Hollister Hills has incorporated adaptive management practices driven by the data collected from biological monitoring. For example, environmen-

tal scientists are examining the results of amphibian monitoring to determine if the feral pig control program (discussed below) has influenced amphibian populations. The most recent amphibian surveys done over the past two years indicate healthy California red-legged frog populations with at least two breeding ponds.<sup>35</sup> Additionally, populations of California tiger salamander, Pacific chorus frog, western toad, and California newt are also prevalent in the park's ponds.<sup>36</sup>



The park has been challenged to maintain consistency in its monitoring program during the past two years because, due to a number of reasons including statewide hiring restrictions and freezes, the park was without an environmental scientist for most of that time. Monitoring was accomplished by environmental scientists loaned from other locations. The situation was recently resolved with the hiring of a full time environmental scientist for the park.



Monitoring for non-native invasive plants is done on a continuous basis to determine if species control measures have been effective or need to be modified. The Park has maintained a grazing program, to reduce fire danger by reducing accumulation of fuels (grass) and to help control invasive weeds, for the last 15 years. To monitor the effectiveness of grazing in accomplishing these goals, data is being collected on several com-

Collecting Hairy Weevils to combat Yellow Starthistle

ponents of the program. In 2008 the District negotiated a contract with the University of California (UC) at Berkeley to complete a two year study assessing the effectiveness of the grazing as it pertains to suppressing invasive plants. The park retained the expertise from



UC Berkeley to review and interpret data in association with the grazing program, with a focus on adaptively managing the culturally significant grazing program to reduce non-native plant dispersal.

The primary goal of the UC Berkeley study is to develop an improved Grazing Management Plan (GMP), with monitoring objectives which address the management of grazed lands in the park. This effort is an ongoing process and UC Berkeley should have a recommendation available for the District Superintendent in early 2011. As part of the GMP, monitoring of changes in vegetation has been done in the past but has stopped in recent years due to staff vacancies. The park does have plans to restart the vegetation monitoring of grazed land with modern GIS techniques that will more effectively map the changes in plant communities.

Non-native feral pigs are found throughout Hollister Hills SVRA, and their presence is having a negative effect on native ecosystems.<sup>37</sup> This invasive species damages sensitive habitat, specifically the wetlands in which the federally-listed threatened California red-legged frogs and California tiger salamanders breed. In 2006, California State Parks established a MOU for the depredation of non-native feral pigs with the CDFG. The agreement allowed park rangers to dispatch feral pigs throughout the park when it was safe and convenient to do so. This helped



to control the population, but a greater effort was needed.

In 2009 with the assistance of CDFG, the park began an aggressive pig monitoring and depredation program. Hollister Hills SVRA contracted with Rural Pig Management, Inc. to establish a feral pig depredation program. The main purpose of the program is to reduce pig populations by trapping and killing pigs within the park. Rural Pig

Oakie restoration project #1

Management, Inc. provides the park with data including number of pigs taken, gender, estimated weight and age, and location and time of take. Additionally, the contractor assists CDFG by providing intestinal samples for *E. coli* testing. CDFG and State Parks are using the information obtained at Hollister Hills SVRA to assist in the statewide cooperative program between the two agencies. Since the program began, there have



Oakie restoration project #2

been significantly less feral pig sightings in the park. Amphibian studies completed in 2008 and again in 2010 indicated a healthy population of both California red-legged frogs and California tiger salamanders. The park will continue to monitor pigs and amphibians and base management decisions on new data as it becomes available.

The primary cause of erosion at Hollister Hills is rill erosion caused by water concentrating into innumerable, closely spaced small channels. If these are not maintained, they cut vertically and horizontally and eventually lead to the formation of gullies which further accelerates the loss of soil.

The park's Soil Conservation Plan identifies protocols for assessment, maintenance, and monitoring of trail and soil conditions. Monitoring is done on a quarterly basis and consists of an inspection of the entire trail system by the trail crew to observe conditions and identify potential problem areas. Quarterly monitoring components include photos taken by digital GPS-enabled cameras at established photo points. This photographic record allows for photographic



Oakie restoration project #3

analysis and comparison to detect and quantify changes. Informal monitoring is performed weekly by volunteers through the Trail Watch Volunteer Program. This allows for documented observations after weekends and busy periods, which result in monthly work assignments and trail repairs to rectify problems that were discovered. All monitoring data are compiled into reports by the District trail coordinator. The trail inspections, monitoring, and documentation ultimately result in an annual trail maintenance repair priority schedule.

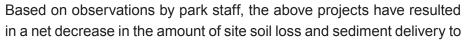
Hollister Hills is divided by the San Andreas Fault leaving roughly half of the park with a high clay content soil and the other half with a sandy decomposing granitic soil. The clay areas of the park are much more stable and require much less maintenance, allowing for trails with steeper hills

and sustainable hill climbs. Conversely, the granitic soil areas are less stable and must be continuously monitored for soil loss. Installing erosion control features such as rolling dips and water bars, rerouting trails or sections of trails, and closing non-sustainable areas are just some of the more modern techniques used by staff to improve the historic trails in the park. Areas which are closed are revegetated with local native plants and grasses to act as bio-filters and to stabilize soil.



Oakie restoration project #4

All trails receive routine maintenance that involve filling in rills by pulling in outside berms and slough and then compacting the soil back in to the trail tread. Erosion control features are regularly cleaned and checked for effectiveness. When monitoring reports determine that a trail is no longer sustainable despite frequent maintenance, the trail or trail section will be rerouted, have additional erosion control features installed, or be closed. In the past five years, numerous restoration projects were completed at Hollister Hills SVRA. These rehabbed trails will continue to be monitored to ensure the effectiveness of the corrective actions.

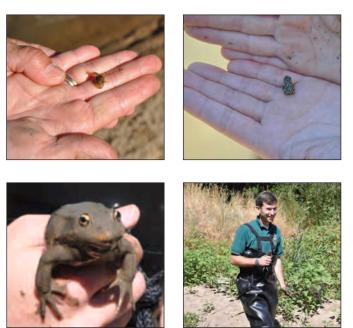




Red-tail Hawk

adjacent ephemeral and perennial stream courses, which should improve water quality. Recently the park began a five-year water monitoring program with the assistance of California State University at Monterey Bay to determine the effect these projects have had on soil conditions.

Hollister Hills SVRA is in its seventh year of continuous dust monitoring, and is moving forward with the expansion of the park's dust monitoring program. Working with the Monterey Bay Unified Air Pollution Control District, the first phase of the program established a baseline of the particulate matter recorded in the 10 micron range ( $PM_{10}$ ) for one year starting in July 2004. Data was gathered at five sites within the park. Two of the monitoring locations were in the existing park boundaries, and three were in the newly acquired areas. The data showed that levels at all locations in the park were well within acceptable ambient air quality standards, with peak values typically less than half the California standard.<sup>38</sup>



Red-legged Frogs

The park is entering the second phase of the program, which will include installation of three permanent monitoring sites. E-BAM Mass Monitors will continuously measure dust samples every hour, uploading the information via satellite. The units are compliant with EPA standards and also include meteorological instruments that record weather data for analysis alongside the dust levels. Due to the remote locations of the dust monitoring sites, the units will be powered by solar panels, with large battery backups for uninterrupted monitoring.

### **Hungry Valley SVRA – Monitoring**

For the purpose of annual habitat monitoring, Hungry Valley SVRA is broken into five habitat types: mixed shrubland, juniper shrubland, grassland, mixed woodland, and riparian woodland. For the vegetation surveys, one OHV recreation plot and one control plot are surveyed for each habitat type, except for the riparian woodland in which only one control plot was surveyed due to the fact there are no riparian OHV recreation areas within Hungry Valley SVRA. Therefore, the total number of vegetation plots surveyed is nine. An expanded version of the California Native Plant Society (CNPS) field sampling protocol was integrated into the HMS and is conducted on all nine plots annually.

The bird, herptile and small mammal surveys are carried out on a total of 11 plots; one riparian woodland control plot, along with two plots per remaining habitat type are surveyed; one being control and one OHV. Two additional animal concentration plots are also surveyed, bringing the total to 11. Bird surveys are conducted in both spring and winter as per 1997 protocol changes. Small mammal monitoring is now carried out every other year per 1998 protocol changes. Large mammal monitoring using three remote operating cameras is conducted every



Mountain Lions

summer. The precise protocols for each animal type are detailed in the 1997 San Diego State University<sup>39</sup> report and the HMS<sup>40</sup> document.

A ground based vegetation cover photo-monitoring program for Hungry Valley SVRA is conducted twice a year. Digital photographs are taken under identical conditions from each of the



Small flower Melic in nature habitat

11 permanent photo-points. Photo-documentation sheets are prepared for each photograph showing: date, time, bearing, weather, camera, and lens. The digital images are preserved for comparisons of vegetative cover and are available for review.

Aerial photographs of the entire park were taken in 2000 with the large 9"x9" negative format and a 1:12000 scale. This image monitoring process was changed from aerial photographs to satellite imaging in 2004. A color satellite image

has been received at this time. It is in a GIS digital format with one-meter location accuracy and resolution. This image is outstanding and is a great asset to the vegetation monitoring program. All of these monitoring programs have been carried out completely and consistently for the past 14 years creating a significant data archive.

### Analysis of Habitat Monitoring Data

The District senior environmental scientist completes an Annual Habitat Monitoring Report<sup>41</sup> to determine the recreational impacts on SVRA habitats. Data from animal and vegetation surveys are recorded and entered into Diversity Calculation spreadsheets. The Diversity Calculation spreadsheets list the plot number, habitat type, sample area and all other plot description information, as well as calculating density, diversity and evenness for each plot. At this point in the

data analysis, processed data from the Diversity Calculation spreadsheets for each plot are entered into graphs for each indicator to determine trends in habitat health at each plot. These graphical representations make it easier to understand and visually see any long-term changes that are occurring at the park and make appropriate management responses. (See Report Requirement No. 2 for condition assessment.)



Annual vegetation monitoring

The HMS program is assessed annually and changes are made as needed. For example, a GIS/GPS protocol was added for monitoring the coast horned lizard (species of

concern) and raptor nest sites. Data from specimens found are placed in a GIS database to determine species range and population health. In 2007, staff implemented a GIS Exotic Plant mapping database, and in 2008, staff updated and increased the number of wildlife cameras in the park during large mammal monitoring.

The entire Division HMS program recently had a scheduled audit conducted by UCD. Recommendations included changes to create more random sampling protocols and additional monitoring for invertebrates and bats. Most significantly, recommendations were made to more seamlessly integrate the findings of the monitoring program into SVRA management actions.

### **Vegetation Management**

The primary goal of the Hungry Valley re-vegetation program is to rehabilitate sites which have been identified as a source of soil erosion (high soil hazard rating). Starting in FY 2006/07, a five-year plan<sup>42</sup> was placed in effect to revegetate areas impacted by OHVs in the trail riding area. This will include planting native plants grown in the park's own greenhouse and hydro-seeding areas to help the revegetation process.

Approximately 500 acres have been restored in Hungry Valley since 2004. The restoration budget varies from year to year, based on need. On average, 10,000 person hours a year are expended on restoration and invasive plant removal at Hungry Valley SVRA.

Invasive plants are a significant resource issue for Hungry Valley SVRA. Interstate 5 acts as a vector for the spread of invasive plants into the park. The five invasive pest plants of greatest concern for Hungry Valley SVRA are: Yellow Starthistle (*Centaurea solstitialis*), Giant Reed (*Arundo donax*), Pampas Grass (*Cortaderia selloana*), Dalmatian Toadflax (*Linaria dalmatica*), Tree of

Heaven (*Ailanthus altissima*), and Perennial Pepperweed (*Lepidium latifolium*). All five species are within or along the edge of the Hungry Valley NGMA which is adjacent to Interstate 5. The value of this grassland habitat underscores the importance of controlling these invasive plants. In FY 2005/06 extensive work began to limit the spread and treat these infestations. To date, the spread of these plants is being controlled and some reduction in the acres infested has been measured through GIS mapping. However, eradication will require several more years of work.

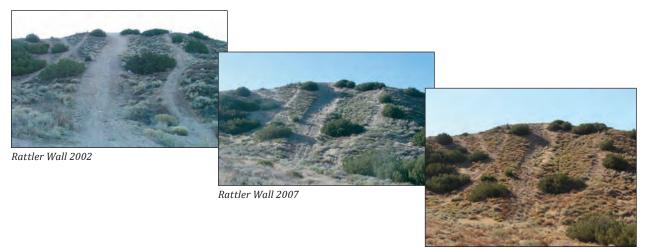


Toadflax

### **Trail Management**

One of the primary goals of Hungry Valley SVRA is to build and maintain a sustainable trail system. Maintenance of the trail system is critical to control erosion and provide an enjoyable riding environment. A robust monitoring and maintenance schedule is in place for all trails. A Trail Maintenance Plan,<sup>43</sup> which includes an Annual Trail Condition Evaluation and quarterly inspections, ensures that prioritized trail work is completed. Another key factor in trail maintenance is controlling off-trail OHV use. This activity is curtailed in the environmentally sensitive areas of Hungry Valley SVRA through visitor education, signage, and when necessary fencing.

If a section of a trail fails to meet the Soil Standard<sup>44</sup> due to design or erosive conditions, the trail is relocated and redesigned to correct the problem. Damaged areas are then returned to their natural contours and revegetated with native vegetation. Examples of trails where this type of treatment has been applied include, but are not limited to, Rattler Trail, Edison Canyon, Middle Wall, Pipeline Road, and South Wall.



Rattler Wall 2010

#### **Oceano Dunes SVRA – Monitoring**

Every year, Oceano Dunes SVRA environmental science staff spends the great majority of its time and resources monitoring the nesting and fledgling (e.g., when chicks are deemed capable

of flight and living on their own) success of the state- and federally-listed endangered California least terns and federally-listed threatened western snowy plover. For the five years from 2005 through 2009, the park has maintained a western snowy plover population of over 100 breeding birds. The site has also fledged an average of 64 birds per year and has achieved a five-year fledge rate of greater than one fledgling per breeding male (average = 1.1). The USFWS has established a breeding recovery goal of one bird fledged per breeding male for western snowy



Western Snowy Plover

plover;<sup>45</sup> the SVRA has thus exceeded this goal. Through this program, the Division has been able to demonstrate that it is promoting the recovery of snowy plovers at Oceano Dunes SVRA.

The California least tern has also achieved strong nest and fledgling success at Oceano Dunes SVRA. From 2005 through 2009, breeding adult populations ranged from a low of 25 pairs to a high of 55 (CDPR 2009). During this same time period, the site has achieved an average fledge



Beach Wrack

rate well in excess of one fledgling per breeding pair and produced more than 50% of all tern fledges recorded in San Luis Obispo and Santa Barbara Counties.<sup>14</sup>

In addition to the nesting and fledgling success information, the plover and tern management program has generated useful information on management of coastal strand (i.e., sandy beach) resources. Since 2007, staff has contracted with the University of California Santa Barbara to study the impacts of OHV

recreation on the insects that feed on surf cast kelp. The beach invertebrates are an important food supply for western snowy plovers, and there was a concern that food availability could be a limiting factor in breeding success. Through this work, staff has initiated management activities designed to assist in the recovery of beach invertebrate communities through the addition of invertebrates and augmentation of nearshore areas with beach wrack (surf cast kelp). The research is ongoing with results still being analyzed and not available at the



Fisheries surveys in Arroyo Grande Creek

time of this report. However, preliminary analysis indicates the management activities are having a positive impact on beach invertebrate communities, possibly contributing to the breeding success of plovers on site.

Park staff conducts fisheries surveys of Arroyo Grande Creek on a quarterly basis to document trends of native fish populations. These surveys have recorded important trends in species like the federally-listed endangered tidewater goby and the threatened steelhead trout. One notable



observation from these surveys was the changes in tidewater goby populations associated with upstream water supply issues. Tidewater goby were found in the Arroyo Grande Creek estuary in 2006. They had been occasionally reported from the site, but were thought to be extirpated



Oso Flaco Lake

(locally extinct). Goby were found in subsequent surveys, and there was strong evidence of breeding activity. In 2008 and again in 2009, drought conditions coupled with upstream domestic and agriculture water use caused the estuary to completely dry up. Tidewater goby were thought to be extirpated from the estuary in 2009 but were found in small numbers in 2010. It is unknown if goby recolonized the estuary from adjacent sites or if the population persisted in the estuary naturally. As a result of this information

on tidewater goby, staff has renewed efforts to become more involved in watershed issues, advocating for more water and engaging in existing watershed planning efforts, to guarantee a consistent supply of water for wildlife.

In 2009, Oceano Dunes SVRA also entered into a three-year contract with the Coastal San Luis Resource Conservation District to better assess water quality in Oso Flaco Lake. This effort will generate useful information on nutrient and sediment loading into the lake, including more data on the source, nature, and extent of the contaminants.

Analysis of this data is in the early stages, and results are considered preliminary at this time.

In 2009, Oceano Dune SVRA entered into a twoyear contract with the CDWR Environmental Site Assessment Section to conduct water quality and soils contaminant surveys of the SVRA. Analysis of this data is in early stages, and results are considered preliminary at the time of this report.



Oceano Dunes SVRA also conducts annual HMS monitoring that includes monitoring of vegetation, shoreline birds, terrestrial birds, and herpetological resources. Surveys are also conducted for small and large mammals, but not on an annual basis. Results from the annual HMS monitor-

ing are difficult to interpret because of the natural variation in a dynamic dune system. Using the current HMS methodology, it is difficult to distinguish recreation and other human-caused impacts from natural population variation.

Based upon field investigations every year, Oceano Dunes SVRA environmental scientists implement a major (more than a few acres) and several minor restoration projects to control sand movement and maintain the habitat values of the vegetated islands, wetlands, Oso Flaco Lake, and other sensitive resources located within or adjacent to the open



Coastal Sage Scrub

camping and riding area of the park. Over time, these areas can become inundated with shifting sands. Since 2004, Oceano Dunes SVRA has restored approximately 140 acres of actively shifting sand dune. Park staff runs an active greenhouse operation producing over 20,000 native plants per year to install in restoration areas.

Some recent restoration efforts include the 2007 "40 Acre Wood" restoration project where 28 acres of active sand sheet were revegetated with native dune species. This project helped control the movement of sand into Oso Flaco Lake. Additionally, restoration projects have been completed at the Maidenform (2008), Table Top (2006), and Pipeline (2009) vegetated islands. Monitoring plots are being established in these restoration areas to demonstrate the success of these projects and the recovery of these restored areas to support the full complement of native plant species.

### **Ocotillo Wells SVRA and Heber Dunes SVRA – Monitoring**

Monitoring for habitat and presence of special-status species is a major component of the Ocotillo Wells District Resource Management Program and is conducted at both SVRAs. Protocols for most monitoring surveys have been adapted over the last decade to improve sampling numbers. Monitoring protocols are designed to collect data that can be used to develop adaptive management responses to manage resources in a sustainable fashion.

The flat-tailed horned lizard, a CDFG species of special concern found within Ocotillo Wells SVRA, is the subject of a multi-agency conservation agreement with a management strategy that includes a substantial monitoring component. For the last four summer seasons park staff has been utilizing an occupancy protocol. This species is also often observed during the twice yearly herptile survey portion of the HMS. Data regarding when and where individual lizards are found become part of the developing GIS database for the park.



Flat-tailed Horned Lizard

The HMS is completed on as many as 24 habitat monitoring plots for vegetation, herptiles, large mammals, birds, and small mammals once or twice a year. Four of these plots are located in



Heber Dunes SVRA; the remainder are in Ocotillo Wells SVRA. The expansion of plots over the next five years, especially replicates and controls, is a goal for this program.

Beginning in 2004, increased funding has enabled the District to expand the resource program through increased staffing and monitoring. Reptile monitoring has increased in frequency going from two 1-week surveys on a limited number of plots to two 3-week surveys on twice as many plots. Flat-tailed horned lizard

surveys have been expanded to cover the number of plots recommended by the Interagency Coordinating Committee. Additionally, vegetation surveys are done on a regular schedule, and bird surveys are better synchronized from year to year. The remote wildlife camera program at Ocotillo Wells SVRA has been expanded, and some areas of the park have been revegetated.

Over time, habitat monitoring at the District has provided an inventory of species and habitats and aided in the design of special-status species monitoring protocols, such as the flat-tailed horned lizard and the Colorado fringe-toed lizard at Ocotillo Wells SVRA. This analytical process will guide management decision making to determine which OHV use patterns may be sustainable and where changes in current management patterns are needed.



#### Natural Resource Management Challenges and Resolutions

Environmental staff has observed significant loss of vegetation, soil, and general habitat integrity in some sampled habitats. Park management and staff are concerned about these developments and will continue to survey, gather monitoring information, and review various corrective strategies. One strategy that could be employed to minimize such impacts in this area would be to confine the recreation to designated routes. However, converting Ocotillo Wells to a "trails only" area would be a significant departure from the current management approach and would be difficult to achieve from a physical project level. A trails only area and enclosure plan has been proposed for a portion of Heber Dunes SVRA and is being considered as part of the General Plan/EIR review for the park. At Ocotillo Wells, use questions such as designation of formal camping areas and trail corridors and routes will also be considered as part of the general



planning processes currently under way. Regulatory agency comments and involvement throughout these processes will assist efforts to protect natural resource values while providing for visiting public needs.

One resource concern at both parks is invasive exotic plants. The three plants of greatest concern at Ocotillo Wells SVRA are tamarisk, Russian thistle, and Sahara mustard. At Heber Dunes SVRA, the primary species of concern is the invasive

salt cedar species of tamarisk. The noxious weed program goal is complete elimination of the invasive tamarisk species where clear habitat values predominate. However, as discussed above, recognition must also be given to the role of tamarisk species at Heber Dunes SVRA for shade, dust, and wind control benefits. This species is prevalent throughout all major and some minor washes in Ocotillo Wells SVRA and various locations throughout Heber Dunes SVRA. Control and elimination requires ongoing cutting and spraying over a period of years. A contract has been initiated with five phases of cut and spray beginning in 2010.

Five invasive wildlife species have been found at Ocotillo Wells SVRA: Eurasian collared doves, house sparrows, European starlings, rock pigeons, and American turkeys. There are currently no standardized methodologies to eliminate these species, except the turkey. Turkey control has not been pursued because turkeys have only been encountered once and do not appear to be spreading into the park at this time. Invasive wildlife at Heber Dunes SVRA includes numerous

species not known to breed at the park such as house mice, feral cats, and feral dogs.

As part of an effort to improve the existing trail network, Ocotillo Wells has assembled a trails management team to work in collaboration with the environmental review team. The development of a dedicated trails team has allowed the



development of staff with specific skills and experience related to sustainable trail design and maintenance.



The Ocotillo Wells District education and interpretation program has been strengthened during the past two years and continues to provide a variety of programs to educate visitors about recreation, resources,

and the importance of the visitor's role in resource protection and sustainable OHV opportunities. This past season over 50,000 visitors participated in Ocotillo Wells' public outreach program. Interpretation and education programming has been augmented in all aspects of park operations, including placing informational signage. Brochures for the flat-tailed horned lizard, guides to wildflowers and reptile species, park newsletter, as well as interpretive events at various locations and times with varied themes, have all been implemented in all areas of park management, primarily at Ocotillo Wells SVRA. To analyze the



effectiveness of the education program in protecting park resources, continued monitoring is taking place at various locations within Ocotillo Wells SVRA. The placement of information signs at restoration sites and enclosures is now standard practice.

#### **Restoration**

Since 2004, several fence enclosures were constructed for various restoration and monitoring projects at Ocotillo Wells SVRA. Currently plans include rotational closures and subsequent restoration activities for several habitats, including one at Heber Dunes SVRA. The majority of restoration activities to date involve closure of mesquite dune habitat.



The largest fence project took place in 2006 and 2007, when monitoring had determined the mesquite dune habitat at Barrel Springs could not sustain vehicle recreation. This was due to the soil/plant interdependency and fragility in relation to wind erosion that regularly occurs at the park. Closing the area was part of a larger program to enclose all mesquite dune habitat areas. Barrier fencing has proven successful with substantial improvement documented in annual plant production and perennial plant recruitment. This restoration east of Devil's Slide has been used as a restoration model throughout the park where other mesquite dune habitat occurs.

Additional mesquite dune habitat fences have been constructed in Morton Dunes and Barrel Springs. These areas were experiencing habitat loss and disturbance of cultural features. All areas contain educational signs explaining





the importance of these areas. In 2008 park staff fenced a large area at Gas Domes to prevent erosion and disturbance of natural gas domes.

Current restoration efforts include a planting program using plants raised at the park greenhouse facility. Planting projects include areas already enclosed as well as various wash and natural spring areas where plants are likely to encounter natural water or flooding events. Success at

spring sites has been low and at open riding areas very low, but plants regularly watered in enclosures have done fairly well.

Monitoring of restoration projects occurs on an annual basis at those plots established in earlier enclosures, and monitoring of plantings occurs several times a month to track progress. Areas

are checked for vegetative cover and diversity as part of the regular HMS. Both the Barrel Springs and County Line enclosures experienced severe erosion and undermining of dune structure in the areas left open for through traffic between adjacent areas. Once those paths of travel were closed to continued vehicular use, natural sand deposition allowed for some progress toward a more natural erosion regime.



This past year due to a significant loss of plants in the mesquite area near Highway 22 and Holly Road, a fence was constructed that closed 12 acres of riding which allowed the dune habitat to reestablish itself. Staff is continuing to monitor and educate the public about the fragility of dune habitat.

There is now data that indicates the presence of a complete cultural village with many burial sites in the east part of Ocotillo Wells. This area is mostly BLM property that is managed by Ocotillo Wells under an MOU. Park staff is working with the Native American community and BLM to fence portions of the village.

#### **Prairie City SVRA – Monitoring**

For the past several years, park environmental scientists have conducted annual surveys measuring various aspects of the park's ecosystem, including vegetation, birds, amphibians, reptiles,

and mammals. The goal of these monitoring efforts is to establish an inventory of the various species and measure changes in their abundance and composition over time. The data are then used to develop and implement adaptive management practices in the park, such as trail reroutes or restoration projects. The surveys have found the park is visited or home to over 93 species of birds. Of particular interest are the common yellowthroat, lark sparrow, and Lewis's woodpecker, populations which, according to the Audubon Society, are considered to be in decline, but continue to show strong populations within the SVRA.





Prionus Beetle

In addition, these survey efforts have revealed and confirmed the presence of

several special-status species, including the federally-threatened valley elderberry longhorn beetle and vernal pool fairy shrimp, the state-threatened Swainson's hawk, and two California species of special concern, the western spadefoot toad and the western pond turtle.

The vernal pool area, which is closed to OHV use, had previously received cattle grazing when the land was used for ranching purposes many years ago, which

no longer occurs. Without the influence of management techniques such as grazing to control invasive plants, the vernal pool habitat has degraded.<sup>46</sup> Additional surveys will be needed to determine whether the population of fairy shrimp has declined in recent years and, if so, whether it is due to changing climatic conditions or the increase in pool vegetation by invasive species. Park staff is currently working on a vernal pool vegetation management plan, particularly focusing on controlling or eradicating the invasive vegetation. This plan will be available as





Vernal Pool Wildflowers

a reference once approved. The

actions recommended by the vernal pool vegetation management plan should reduce the amount of invasive weeds, especially Medusahead and yellow starthistle affecting the vernal pools.

Within the OHV use area, however, managing invasive vegetation, especially starthistle, has proven to be a greater challenge. Starthistle is a difficult invasive weed to eradicate

due to its aggressive growth habits and minimal nutrient requirements. Park environmental scientists would like to implement biological controls for starthistle, such as insects or molds, as they feel it is the most practical application to combat the problem. Grazing may also be an option and is currently under review. Large scale herbicide use is expensive, and controlled burns can



be inconsistent from year to year due to County air quality restrictions. Herbicide use is not the preferred method since the park is home to several special-status plants and animals. Biological controls may thus be the best option to manage the starthistle.

An additional area of concern is the stand of blue oaks located in the southeastern portion of the park. Although the existing mature trees are quite healthy and provide habitat for dozens of birds and small mammals, the regeneration of oaks has been slow and minimal. This may be due to OHV activities, climatic changes, or the lack of acorn production by the oaks. Due to

ongoing restoration activities, such as fencing and planting of over 200 saplings, new oak trees have begun to take hold. Annual monitoring of their growth shows a 30% success rate, and staff is hopeful these trees will continue to thrive.

Due to a fairly high staff turnover, trail and soil monitoring activities have been inconsistent through the years. Park management has been able to address staffing issues in recent years, allowing implementation of the 2008 Soil Conservation Standard and monitoring systems. With the Standard in place, a GIS database has recently been developed to assess and monitor roads, trails, and sediment basins. This information has allowed staff to develop more effective plans for restoration activities, design adaptive maintenance techniques which improve trail tread, and implement projects which decrease sediment generation and increase erosion control.



# Habitat Monitoring System Program Review and Improvement

In 2008, the Division contracted with the UCD Information Center for the Environment in a proactive effort to ensure the existing HMS program, developed nearly two decades prior, is providing quality information that is best suited for SVRA adaptive management and resource protection. The program review consisted of an independent scientific peer review and assessment of the existing HMS program for the SVRAs and Division-wide monitoring and reporting protocols.

In the review titled, *Scientific Peer Review and Assessment of the California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division Habitat Management System* (Review), UCD evaluated the practicality of protocols and procedures of each WHPP and HMS in place at the SVRAs. Based upon its scientific peer review and assessment, UCD recommended that the Division design a second generation HMS.

The most fundamental reason why a second generation HMS is needed is because the existing program, from the documentation to the structure of field monitoring plots to data management to analysis



and reporting, is insufficient to meet the needs required by the OHMVR Act to monitor plant and animal populations and their habitats on SVRAs. As determined during the Review, SVRA environmental scientists were unable, using the methods in the original HMS program, to characterize and document changes in the abundances of species of interest. Instead, SVRA environmental scientists were required to rely upon field methods that would often fail to stand up to scientific rigor for environmental monitoring and estimate the changes in environmental conditions on SVRAs using what are called "diversity indexes," which are much more appropriately applied to entire suites of organisms across large geographical areas to address questions related to changes in species diversity (questions of little interest to SVRA environmental scientists). Put simply, the peer review found that SVRA environmental scientists had to step outside of the existing HMS to design sampling schemes that adhere to experimental design considerations and had to analyze their HMS-generated data in their own, idiosyncratic systems that varied widely from SVRA to SVRA, making any comparisons difficult.

Given these findings, the UCD-coordinated peer review panel recommended developing a second generation HMS that, among its many improvements, (1) addresses questions of management interest to SVRA and Division staff, (2) adheres to well-established experimental design methodology, (3) easily and reliably documents the changes in abundance of species and/or habitats of interest through time, (4) incorporates a feedback loop that addressed questions of effectiveness of management changes, (5) is SVRA-specific, and (6) is placed into an adaptive management framework that enables it to change through time in response to changing conditions or management concerns. The second generation HMS must also enable SVRA environmental scientists to easily communicate with now-standard information management systems (e.g., GIS) and to create charts that illustrate the changes in abundance through time in species or habitats of interest.

The Division is moving ahead with implementing these recommendations. A joint effort between UCD and Division staff will lead to development of a second generation HMS that addresses the many deficiencies in the existing HMS, one that would begin with a consideration of the specific questions to be answered at each SVRA, include corrections and enhancements to field sampling methods, improve data management, analysis, and reporting, and make the documentation of environmental changes more directly applicable to individual SVRA management concerns while simplifying the monitoring process for SVRA environmental scientists and enhancing communication with Division staff and interested persons outside the Division.

# **Restoration Work Completed at the SVRAs**

In addition to the SVRA restoration work highlighted above under Monitoring in the SVRAs, the following information expands upon restoration activities and techniques and provides specific examples of successful restoration projects unique to each park.



In the past four years, the challenges facing land managers have been particularly difficult due to increasing demands for managed OHV areas providing highquality recreational experiences, balanced with the protection of resources. As the demand for areas available for OHV use continues to increase, the impacts to the land can be significant. In some instances, the impacts are due to overuse while in other areas it may be due to ingress into closed areas. Superintendents and environmental scientists must work closely to balance

the provision of OHV opportunities while protecting the environment. Overall, restoration projects in the SVRAs have greatly enhanced the health of the park's ecosystem and density of habitat.

The purpose for restoration is to repair and restore habitat that has been impacted by OHV activity in order to provide appropriate ecological balance between the provision of OHV recreation and sustaining a viable species composition. Restoration is one of many responses to the ongoing monitoring of resources.

Each SVRA is unique in the recreational opportunities it provides and the natural resource environment in which



the recreational activity takes place. Equally, each SVRA is different in the impacts the habitat can withstand. When it is determined that conservation or management options are not sufficient to address OHV impacts on habitats or soils, affected areas within the SVRAs are closed for restoration of the land as nearly as possible to its natural condition.

These restoration activities may include:

- Recontouring land or drainage areas to disperse concentrated flows, reduce hydraulic energy, and prevent soil transport
- Installing water control features such as check dams to slow water
- Revegetating the area with native plants by hand or by hydro-seeding

Although the SVRAs are diverse and complex, and restoration solutions and plans are unique to the given park and region, many of the same techniques used to ensure a restoration project is successful are used throughout the SVRAs. Techniques include, but are not limited to:

- Closing the area with protective fencing, barriers, or rock to prevent intrusion
- Planting programs often with plants raised from SVRA greenhouse facilities
- Determining methods for watering plants (when appropriate) which have yet to be fully established
- Monitoring the area to ensure restoration project success. This could be once a week, several times a month, or even annually for established restoration areas

Examples of successful restoration projects at the SVRAs are below:

At Carnegie, due to the steep terrain and dense vegetation, trail crews and environmental scientist staff have collaborated regarding the implementation of restoration work. This work required tooling out large ruts, recontouring trail tread, and installing water control features. Significant restoration projects that have greatly enhanced the health of the park's ecosystem and density of habitat include Rocky Knob, Dead Cow Canyon, and Los Osos.





Carnegie: The Los Osos drainage area had been experiencing indicators of potential erosion issues. In 2009, to prevent the problem from developing, crews recontoured the drainage to help disperse the concentrated flow, installed several rock check dams to slow the water, and hydro-seeded the uphill slopes to help with infiltration.



- Prairie City: Park staff installed protective fencing around a sensitive stand of native blue oaks. Staff planted seedlings and will continue to collect acorns and plant oaks in the area.
- Hollister Hills: A "volunteer" trail bisected Lupine Loop Trail causing rivulets and eventually ruts that were depositing sediment. This restoration project repaired the rutted portions, recontoured, and revegetated the area.



Hollister Hills: This area had been denuded and severely impacted. Restoration efforts successfully recontoured, hydro-seeded, and fenced the area allowing for better management of the trails that are in the area.



- Oceano Dunes: Staff has undertaken one large restoration project every year since the early 1990s to manage sand movement into this native dune and dune scrub habitat. Since 2004, approximately 140 acres of actively eroding sand dunes have been restored.
- Oceano Dunes: In 2007, a restoration project resulted in the restoration of 28 acres of active sand sheet. This project helps control the movement of sand into Oso Flaco Lake.



Hungry Valley: Park staff has focused on the restoration of several hill climbs. Recontouring
of the slopes, rehabilitation, hydro-seeding, and fencing were used to successfully complete
these projects.



- Hungry Valley: In 2007, a major erosion control project was carried out on the stretch of Maxey Wash behind Smith Forks Campground. The wash was hard surfaced with carefully placed 3-foot to 5-foot diameter boulders, which eliminated soil loss and erosion adjacent to the campground.
- Ocotillo Wells: The largest fencing and restoration project took place in 2006 and 2007, when a large area of mesquite dune habitat was enclosed east of Devil's Slide Road to Wolfe Well Road and in the dunes northeast of Benson Lake after showing signs of serious degradation due to OHV activity. Current restoration efforts include a planting program using plants raised at the park greenhouse facility.

## Habitat Management Program

USFS and BLM grantees with projects involving ground disturbing activities must implement a WHPP, known as a HMP under the Grants Program. The HMP requires grantees to identify special-status plant and animal species that could be at risk from OHV recreation and monitor for potential impacts to those species. As an adaptive management plan, the HMP includes management objectives and actions to address the risk, success criteria to gauge the effectiveness of each management action, and "triggers" for management change. Each grant application cycle, grantees report on the results of the previous year's HMP, including any management actions taken based on monitoring results. The Division developed the WHPP/HMP over several years of working with BLM and USFS environmental staff. The forms, which were largely finalized in 2005, are incorporated into the Grants Program Regulations.

In addition, projects with ground disturbing activities must implement activities outlined in the 2008 Soil Conservation Standard in projects supported by grant funding. The Soil Conservation Standard was incorporated into the regulations governing the 2008/09 grant cycle.

## **Monitoring in BLM and USFS Areas**

#### **BLM Monitoring**

Much remains to be learned about the impacts of OHV recreation on wildlife and vegetation, especially as the spectrum of available vehicle types expands. Given funding and staff available for monitoring, BLM biologists have strategically selected wildlife and vegetation species to monitor. These species or guilds of species (ecologically related species) can furnish the most information about responses by species in OHV recreation landscapes with comparatively modest budgets.



Flat-tailed Horned Lizard

With consistent funding support from the Division since 2003, the BLM has been able to initiate long-term monitoring of several guilds of wildlife species and a number of rare plants. Indicator species or guilds of similar species serve as indicators for "ecosystem health," and they provide BLM with a report card on the flora and fauna located in OHV recreation areas. BLM focuses its OHV monitoring principally in the California deserts and the Inner Coast Range. Focal species include migratory birds, resident raptors, bats, desert lizards, desert tortoise, and foothill yellow-legged frog. Vegetation communities of greatest concern where OHV recreation is popular are desert dunes, creosote scrub, and Sonoran Desert thorn woodlands. In recent years, for example, the Division has supported the BLM partnership with Point Reyes Bird Observatory

(PRBO) Conservation Science to study bird populations and vegetation cover in Sonoran Desert subtropical ("microphyll") woodlands that are popular for OHV touring. These woodlands are also important stopover refuges for birds migrating across the desert. Also, the BLM staff has studied individual plant species such as the Mecca woody-aster, native only to the Meccacopia Special Recreation Area just north of the Salton Sea. Conservation concern for the woody-aster has led to preparation of a conservation strategy developed by the Rancho Santa Ana Botanical Garden.

All monitoring supported by the Division on BLM OHV recreation lands follows detailed written protocols. Project managers train monitoring crews in the field to ensure crew members are equally skilled and results are comparable from one year to the next. With multiple years of consistently collected data, BLM biologists can analyze trend data and adjust management to safeguard wildlife and their habitats.

|              |           | Monito                | oring Plan           | Results                    |                                   |  |
|--------------|-----------|-----------------------|----------------------|----------------------------|-----------------------------------|--|
|              | Agency    | Species<br>Considered | Species<br>Monitored | Objectives Met             | Corrective Actions<br>Recommended |  |
| Grants Cycle | BLM       |                       |                      |                            |                                   |  |
|              | 2004-2005 | 192                   | 122                  | All but 1                  | 1                                 |  |
|              | 2005-2006 | 219                   | 74                   | All but 2                  | 1                                 |  |
|              | 2006-2007 | 197                   | 87                   | All but 5                  | 5                                 |  |
|              | 2007-2008 | 254                   | 82                   | All but 3                  | 3                                 |  |
|              | 2008-2009 | 206                   | 77                   | Yes, all<br>objectives met | Not needed                        |  |
|              | USFS      |                       |                      |                            |                                   |  |
|              | 2004-2005 | 955                   | 365                  | All but 14                 | 15                                |  |
|              | 2005-2006 | 1147                  | 528                  | All but 8                  | 8                                 |  |
|              | 2006-2007 | 1148                  | 511                  | All but 10                 | 12                                |  |
|              | 2007-2008 | 1135                  | 530                  | All but 22                 | 22                                |  |
|              | 2008-2009 | 888                   | 424                  | All but 10                 | 10                                |  |

Summary of USFS and BLM HMP Monitoring, 2004-2009

In the coming years, the BLM is expecting to turn greater attention to mapping and monitoring non-native invasive plants in OHV recreation areas. With an eye to controlling infestations in OHV riding areas, BLM will work with OHV recreation partners to ensure that OHVs do not become major vectors in the spread of weeds. The BLM is also looking forward to collaborating with the

Division and the National Forests to ensure that the agencies are monitoring similar variables and species under uniform protocols. In this way, interagency efforts can build a stronger base of information about wildlife responses to OHV recreation in the varied ecosystems of California.

#### Natural Resource Management Challenges and Resolutions

The BLM is striving to better coordinate law enforcement, recreation, and natural resource staff to protect the natural conditions of BLM public landscapes where OHV recreation takes place. One enduring concern is that OHV recreation may be adversely impacting populations of sensitive desert reptiles. The Division has awarded the BLM a grant to study the effectiveness of current management practices that allow OHV activities in some of the desert washes within Desert Wildlife Management ACECs in eastern San Bernardino counties.



Another resource concern is invasive exotic plants. The BLM Barstow and Hollister Field Offices have been especially active in removing noxious invasive weeds. In Afton Canyon ACEC, a popular OHV destination east of Barstow, BLM staff has been vigilant in controlling tamarisk to promote growth of native willows and mesquite in the canyon riparian woodland. In southern San Benito County, the BLM has been under-

taking prescribed burns to promote growth of rare

native plants and halt the spread of yellow starthistle into OHV recreation areas. Difficult challenges still remain: for example, at the South Cow Mountain OHV Recreation Area, vehicle tires have been shown to be a major vector for transport of weed species into the area. Additionally, invasions of non-native Sahara mustard and bufflegrass on BLM Palm Springs-South Coast Field Office lands west of Blythe present threats



to the local environment. Bufflegrass is removed immediately when found, but Sahara mustard continues to spread into recently weed-free sites like Milpitas Wash.

Maintaining trails, reducing soil erosion, and developing staff expertise for rapid response to erosion problems associated with OHV trails is a major goal for BLM OHV recreation programs. The BLM is partnering with the Division and the USDA Natural Resource Conservation Service to train BLM staff in erosion control methods for OHV trails and in diagnosing potential erosion problems in advance, thus avoiding costly-to-repair erosion caused by headcuts advancing across trails.

The Palm Springs-South Coast Field Office endeavors to balance OHV recreation opportunity with the protection of soils, habitat, and historic and prehistoric resources.

#### **USFS Monitoring**

Within California, USFS Region 5 includes all or part of 18 National Forests, totaling approximately 20 million acres, each characterized by unique and diverse natural resources. All of these forests have received Grants Program funding sometime during the 2004-2009 period.

Of the more than 8,000 vascular plant species occurring in California, well over half are known to occur on National Forest lands. Monitoring for wildlife, fish, and plants has been accomplished through a tiered approach, consisting of local monitoring, including HMPs, focused studies, and regional monitoring. The focus is generally on local monitoring to ensure habitats are maintained and protection measures are implemented. In addition, four focused studies were funded through the Grants Program to assess the effects of OHV use on northern spotted owl, northern



goshawk, American marten, and the vertebrate assemblage. Through 2005, there was an addi-



tional focus on developing and testing a regional monitoring protocol that would supplement the local monitoring. However, beginning in 2006, it was determined that the focused studies should be completed before fully implementing the regional monitoring. Each of these programs is described in more detail below.

**Local Monitoring:** Local monitoring is conducted at the forest level to ensure the standards, guidelines, and protection measures identified in WHPPs/HMPs are being

implemented on the ground. Three checklists are used to focus this monitoring: the Wildlife Habitat Monitoring Checklist, the OSV Monitoring Checklist, and the OHV Stream Channel Crossing Wildlife Habitat Checklist. Examples of items monitored include OHV use off designated routes,

widening of routes or stream crossings, and impacts of vehicles on vegetation. In addition, many forests conduct inventories of species/habitat and monitor threatened, endangered, or sensitive species. Some forests also use photo points in conjunction with the checklists.

Field personnel complete the checklists, which are then reviewed to determine if there are any indications of potential problems. If there are problems, a team will



conduct a field visit of the trail segment to review the problem area and determine what corrective actions, if any, are needed. For some problems, such as unauthorized (user created) routes, corrective actions (closure, signing, limited operating periods, etc.) are taken without the need for additional analysis.

**Focused Studies:** During 2004 to 2009, the Grants Program helped fund four focused studies, each designed to address specific management questions for species at risk and determine if OHV/OSV activity caused any adverse impacts. Of the four studies, the American marten focused study<sup>47</sup> has been completed. The other three are anticipated to be completed in early 2011. All four are described in more detail below.

American Marten Focused Study: The American marten focused study was finalized in 2007. This study evaluated the effects of OHVs/OSVs on American martens by comparing marten occupancy rates and probabilities of detection in areas where OHV/OSV use is legal and encouraged (Use Areas) and in designated wilderness areas where OHV/OSV use is prohibited (Non-Use Areas). The study was conducted in the Lake Tahoe Basin Management Unit and Sierra National Forest using remote sound level meters, track stations, remote camera stations, and field observations. The study also assessed the potential effects of OHVs/OSVs on marten sex ratios and circadian (e.g., 24-hours) patterns of activity. The study found that martens were ubiquitous in Use and Non-Use Areas, and there was no effect of OHV/OSV use on marten occupancy or probability of detection. It is possible, however, that OHVs/OSVs have effects, alone or in concert with other activities (e.g., timber harvest), that were not quantified in this study. The two study areas also had low OHV/OSV use levels impacting only a small percentage of a marten's home range. The application of these results to other locations is thus only appropriate if OHV/ OSV use at the other locations is no greater than reported in this study.

**Northern Goshawk Focused Study:** This study, conducted on the Plumas National Forest, evaluates OHV/OSV use and noise around Northern goshawk nests and nest stands and uses experimental manipulations designed to evaluate the bird's sensitivity to direct disturbance by OHVs/OSVs during the nesting, post-fledging, and winter (non-breeding) seasons. The study will estimate the relationship between goshawk reproductive success, post-fledging survival rates, nesting behavior, and likelihood of nesting relative to OHV/OSV use and noise.



**Vertebrate Assemblage Focused Study:** This study, conducted on the Lake Tahoe Basin Management Unit, Sierra National Forest, and Stanislaus National Forest, assesses the effects of OHV use and roads on forest songbird communities, forest-associated small mammal species and communities, and forest-associated bird and mammalian carnivores, including prey-base implications for top carnivores. The study pairs OHV use areas with similar areas not receiving

OHV use, within which habitat and recreational use were measured and species surveys were conducted.

**Northern Spotted Owl Focused Study:** The objectives of this study, conducted on the Shasta-Trinity and Mendocino National Forests, are to: (1) describe northern spotted owl stress levels,



behavior, and nesting success and OHV use at selected northern spotted owl nest and/or roost sites over time; (2) determine whether OHV use affects northern spotted owl stress levels, behavior, or nesting success, and, whether observed effects vary with reproductive state over time; and (3) determine the need for disturbance-specific management considerations to minimize potential adverse effects of OHV use on spotted owls that reside on NFS lands. Experimental treatments were used to expose northern spotted owls to simulated OHV use events, and stress levels were measured via corticosterone analysis of collected scat.

**Regional Monitoring:** Regional monitoring is designed to assess randomly selected OHV use sites on National Forests in California. Each OHV use site is paired with a similar non-OHV use site to interpret conditions observed at OHV use sites. At each of the sites, OHV use, habitat, and plant and wildlife species are monitored, similar to the methodology used in the vertebrate assemblage focused study. The regional monitoring protocol was pilot-tested for summer and winter seasons; additional data were collected in association with the vertebrate assemblage focused study. This project was not funded between 2006-2009 because of limited funding and a priority on the focused studies. Analyses and conclusions from the vertebrate assemblage focused study will be used to finalize the protocol, and phased implementation onto the 18 National Forests in California is anticipated once the focused studies are complete.

#### **REQUIREMENT NO. 5**

Actions taken by the division and department since the last program report to discourage and decrease trespass of off-highway motor vehicles on private property.

#### **Trespass**

Unfortunately, trespass and incursions into closed areas do occur, whether intentionally or unintentionally, and monitoring these incursions can be difficult. Division coordinates with the BLM, USFS, County Sheriff's Departments and other law enforcement agencies to monitor Wilderness boundaries, private property, and other closed areas, and to implement focused enforcement actions to successfully address specific trespass and Wilderness incursion concerns that arise. In an effort to reduce violations, the Division and its partners use





various approaches to educate the public on the importance of respecting closed areas and private property boundaries, as well as the consequences of ignoring applicable laws.

Preventing trespass onto private property and other areas closed to OHV recreation is one of the central objectives of the OHMVR Program. The OHMVR Program was founded on the principle that "effectively managed areas and adequate facilities for the use of off-highway vehicles and conservation and enforcement are essen-

tial for ecologically balanced recreation." (PRC § 5090.02 (b).) Effectively managed areas and adequate facilities provide law abiding recreationists with a legal alternative to trespassing onto private lands and closed areas in search of recreation.

To discourage and decrease trespass, the reasons people engage in this activity must be considered. Instances of trespass can generally be traced to factors such as:

- Lack of adequate signage informing recreationists of property boundaries
- Misinformation or lack of information regarding applicable laws



- Disregard for private property boundaries arising from:
  - Frustration over lack of appropriate and accessible OHV recreation opportunities
  - Willful disobedience of laws

Ensuring enthusiasts recreate in legal, managed areas requires:

- Providing an alternative to the inappropriate activity—in this case, providing adequate and readily accessible legal OHV recreational opportunities near to the target audience
- 2. Ensuring the target audience has information regarding legal opportunities, and the consequences of illegal behavior
- Enforcing consequences for those who continue to disobey—law enforcement efforts must be consistently applied in order to create an effective deterrent to those who willfully choose to disobey the law

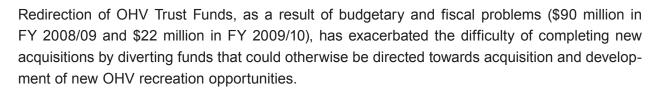
Each of these three points is discussed in more detail below.

# 1. Providing Appropriate Areas Which Are Readily Accessible

The popularity of OHV recreation has continued to rise, while the areas available to legally recreate have decreased over time. Acquisition of new OHV recreation areas to keep pace with increasing demand is a key component of the legislative intent for the OHMVR Program. "New

off-highway vehicle recreation areas, facilities, and opportunities should be provided and managed pursuant to this chapter in a manner that will sustain long-term use." (PRC § 5090.02 (c)(2).)

Acquisitions in recent years have been limited to purchases of "inholdings," which are properties adjacent to or surrounded by existing OHV areas. Acquisition requests for new OHV areas were not approved due to the 2005 Report of the BSA that highlighted the lack of a shared vision between the Commission and Division. This issue has since been rectified, and the Commission and Division now have a shared vision, as well as a Strategic Plan which will guide future acquisition efforts.







One notable exception to the lack of new opportunity was the development and opening of the Renz property at Hollister Hills SVRA. This area was purchased in 1989. After extensive study and planning, a trail system was constructed and then opened in 2006. This trail system was designed to provide a high level of rider interest while at the same time minimizing impacts to the environment. Trails were also constructed to minimize sound impacts to neighboring property owners. In 2007, the California Biodiversity Council toured the newly opened trail system and considered it a model for future OHV recreation developments. (See page 136.)

#### 2. Educating the Public

The Division has taken an active role in addressing issues related to OHV trespass. Staff from the Division has been invited to, and participated in, meetings and conferences in local communities who have concerns about illegal trespass and impacts in their communities from OHV use. For instance, when residents from Wonder Valley reported to the Commission their concerns regard-

ing OHV trespass occurring in their community, Division staff visited the area and met with local residents to discuss the issue. Topics such as appropriate signage, identification of property boundaries, and ways to increase law enforcement patrols were discussed with residents, land managers, and local law enforcement agencies. Law enforcement personnel from the Division also assisted local law enforcement agencies in patrolling the area and contacting OHV recreationists to inform them about appropriate areas in which to recreate.

Additional efforts to discourage and decrease trespass on private property have been taken by the Commission and Division. These outreach efforts are highlighted under the "Conflict of Use" section of Report Requirement No. 2.

The importance of education was acknowledged in SB 742 by the creation of a specific category in the Grants Program dedicated to Education and Safety. This category receives 5% of available grant funds. Education projects competing for funding in this cat-

egory must include a comprehensive education curriculum that teaches, among other things, respect for private property and environmental responsibility.







#### 3. Enforcement of Applicable Laws

Active law enforcement is an essential element in the effort to discourage and decrease trespass onto private lands. There will always be a need for law enforcement activities to address those who are uninformed of, or choose to ignore, laws relating to responsible OHV recreation.

As referenced on pages 144-145, the Division has taken direct action to address concerns raised by private property owners about inappropriate and illegal use by individuals recreating on OHVs.



# **Financial Support of Law Enforcement Efforts**

The provision of law enforcement patrols to enforce OHV laws and prevent trespass into private lands and closed areas has, at times, been made a low priority by agencies who could not afford to commit funds to the effort. Two sources of OHV funding are available to law enforcement agencies from the OHMVR Program: In-lieu funds and grants from the OHV Trust Fund.

# **Change in In-Lieu Funding Distributions**

A \$4 fee is imposed for the issuance or renewal of identification for each off-highway motor vehicle subject to identification [registration] in-lieu of all taxes on value levied for state or local purposes. (CVC § 38230.) These in-lieu funds are to be used by local agencies to provide OHV opportunities



and facilities, including law enforcement efforts. In-lieu funds are now directed to counties based on how much OHV activity occurs in the county. These funds were previously distributed based on the population of a county. This resulted in some counties with very little OHV enforcement needs receiving large amounts of funding based on their high population (e.g., San Francisco). By directing funds to counties based on the level of OHV activity, counties with

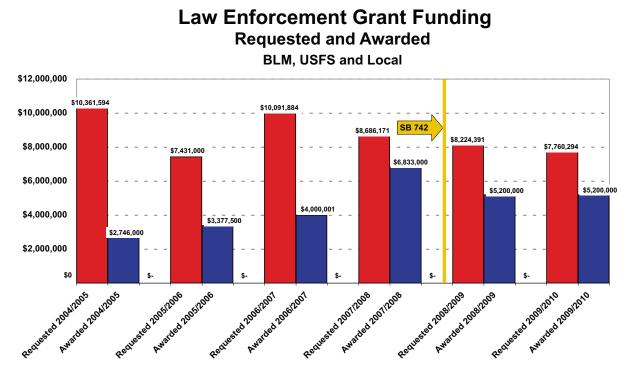
smaller populations that are visited by large numbers of OHV recreationists (e.g., Imperial County) are now receiving a more appropriate share of the available funds.

# **Grant Funding**

Grant funding has been stabilized to provide consistency for local and federal law enforcement efforts year to year.

Due to the previous competitive grant application process, law enforcement agencies were uncertain if they would be successful in securing funding from the Grant Program.

This issue was addressed in SB 742 by changing the way in which funds are distributed. Law enforcement funds are now distributed on a non-competitive basis proportionate to the off-highway motor vehicle needs under each entity's jurisdiction. Also, the level of funding was set at 20% of grant funds available in each grant cycle, thus creating a predictable and consistent level of funding support for law enforcement activities. These changes ensure each agency that demonstrates a need for addressing OHV related issues can rely upon receiving some consistent level of funding every grant cycle. While this will provide a level of stability in OHV law enforcement programs, requests from law enforcement agencies indicate that funding available is far short of the level needed to fully address law enforcement needs statewide.



Note: The enactment of SB742 limits the total annual appropriated grant funding to 20% for law enforcement. This 20% funding is further restricted to 30% each for the BLM and the USFS, and the remaining 40% for local law enforcement agencies.

# **Division Leadership Role in Coordinating Enforcement Issues**

The Division public safety team works statewide with counties and federal agencies to provide tools, techniques, and assistance to help prevent the occurrence of trespass. Law enforcement officers provide expertise and training in the applicability of OHV laws. Where OHV trespass and violations of closed areas have become particularly problematic for local agencies to address, the Division public safety team provides assistance in planning focused enforcement actions, and supplementing local law enforcement staff by directly participating in enforcement actions to detour and apprehend violators.

Division supervising rangers provided OHV law enforcement training to USFS and BLM while conducting field reviews associated with OHMVR law enforcement grants. Other allied agencies such as sheriff's departments and local police departments participated in these training sessions as well. There were approximately 10 training sessions in Northern California and 10 sessions in Southern California in 2009-2010. OHV law enforcement orientation was provided to USFS forest protection officers during their annual training sessions. In total there were 7 hosting agencies, 76 hours of instruction, 154 officers trained involving 12 sheriff's departments, 8 national forests, 5 BLM field areas, and 2 police departments.

| Date       | Hosting Agency                   | Hours | Officers | Attending Agencies                                                          |
|------------|----------------------------------|-------|----------|-----------------------------------------------------------------------------|
| 4/28/2009  | Madera County S/O                | 4     | 16       | Madera S/O, USFS, F&G                                                       |
| 5/27/2009  | Plumas County S/O                | 4     | 16       | Plumas S/O, Butte S/O, USFS, CHP,<br>Oroville PD,USFS, CSP                  |
| 10/26/2009 | Inyo County S/O                  | 40    | 15       | Inyo S/O, USFS, Bishop PD                                                   |
| 2/2/2010   | Fresno County S/O                | 4     | 14       | Fresno S/O, USFS,                                                           |
| 3/17/2010  | California State Parks<br>OWSVRA | 4     | 27       | Imperial, San Diego & Riverside S/O,<br>BLM, CSP                            |
| 4/12/2010  | BLM Barstow                      | 4     | 4        | BLM                                                                         |
| 4/14/2010  | BLM Redding                      | 4     | 21       | USFS, BLM, Shasta S/O, Plumas S/O                                           |
| 5/11/2010  | California State Parks<br>HVSVRA | 4     | 7        | Kern S/O, CSP                                                               |
| 5/11/2010  | Trinity County S/O               | 4     | 19       | Trinity S/O, USFS, F&G                                                      |
| 6/2/2010   | California State Parks<br>PCSVRA | 4     | 15       | El Dorado S/O, USFS.F&G CSP                                                 |
| Totals:    | 7 Hosting Agencies               | 76    | 154      | 12 Sheriff's Offices, 8 Forests,<br>5 BLM Areas and 2 Police<br>Departments |

### Training Provided to Local, State, and Federal Agencies



On January 1, 2003, sound level emission requirements were amended to incorporate stricter limits for OHVs operated on public lands. State, federal and county law enforcement officers, as well as other SVRA employees and volunteers were trained to safely and properly administer sound level emission testing using the Society of Automotive Engineers (SAE) J1287 standard. Since 2005, approximately 500 students have completed this training and are actively monitoring sound emissions at race events, SVRAs, county, BLM, and USFS areas open to OHV use.

#### 2010 Rubicon Trail Law Enforcement Project

Rubicon Trail user groups and other stakeholders expressed a strong desire to have an increased law enforcement presence on the trail to reduce illegal activity and environmental damage. A group of concerned trail enthusiasts had formed a Volunteer Trail Patrol, which had been operat-

ing for several years, but additional presence of uniformed law enforcement personnel was needed to more fully address the issues. As a result, El Dorado County convened a group of law enforcement representatives and other professionals from agencies with jurisdiction along the trail. This group met to discuss ways in which a consistent law enforcement presence could be maintained on the trail.

The group determined that increased patrols by officers from El Dorado County and Eldorado National Forest



were needed throughout the summer season. These patrols could readily work the trail entry points and initial sections of the trail, but pointed out that providing a presence in the heart of the trail was not practical due to the time involved in transiting the trail itself, lack of radio coverage, and the difficulty of providing backup.



To address these concerns, the Division proposed developing a base camp which could serve as a staging area and allow rangers to make patrols at various times of the night and day. By eliminating the long "commute" required to reach the central portions of the trail, more time could be committed to patrolling and public contact. Local landowners offered to host the camp near Spider Lake. This location allowed rangers ready access to areas of the trail far from the trailheads and staging areas. Patrols were done primarily on foot, which allowed rangers to meet and interact with the public as they traveled along the



trail. This "community oriented policing" approach provided ample opportunities for educating the public on appropriate trail use. The yellow bandana campaign, in which yellow bandanas were passed out encouraging people not to leave waste and toilet paper along the trail, was an effective way to break the ice with some enthusiasts who were hesitant to engage with law enforcement officers.

The biggest success of the entire program was the positive interaction with local landowners, OHV groups, environmen-

tal advocates, and

colleagues from other agencies to address problems of mutual concern. The consistent presence of uniformed law enforcement personnel resulted in reduced violations and illegal activity along the trail. The program succeeded because many people are passionate about keeping the trail open, and offered their help and support to the officers on the trail.



#### **REQUIREMENT NO. 6**

Other relevant program-related environmental issues that have arisen since the last Program report.

### **Green Initiatives**

The Division is committed to supporting sustainable OHV recreation opportunities while at the same time reducing effects on the environment by encouraging environmentally responsible choices. Likewise, the Division is committed to becoming a leader in environmental responsibil-



ity and resource protection within the OHV community.

Accordingly, the Division fulfills its commitments through vari-



ous means, including actively pursuing opportunities to implement its green program initiatives as outlined in its Strategic Plan. In addition, the Division is developing, analyzing, and implementing responsible green program management strategies and environmentally sustainable

land management solutions. The Division is dedicated to efforts and actions related to improving technology, reducing use of fossil fuels, increasing energy efficiency, and enhancing the overall environmental sustainability of its operations.

The Division's efforts and on the ground strate-



gies include the purchase of renewable energy and alternative fuels and



vehicles, energy efficiency improvements for new and existing facilities, and the procurement of less energy intensive and more environmentally responsible goods and services. Moreover, the Division actively pursues actions to reduce its carbon footprint, greenhouse gas (GHG) emissions, toxic substances, and waste from its operations. Ongoing research, strategies, and long-term goals include developing green specifications for equipment, facilities, and vehicles.

# **Global Warming and Greenhouse Gas Emissions**

The Commission shares concern over GHG emissions and recognizes the significant adverse impact that a changing climate will have on the state's environment. State and federal policies and regulations are being developed to reduce GHG emissions. In 2006 California's Global Warming Solutions Act (AB 32) was passed. AB 32 recognizes the significant effects of GHG emissions and the threats to public health, natural resources, and the environment of California resulting from global warming. The Division and its SVRAs are committed to complying with AB 32 and other state, federal, and county policies and regulations concerning GHG emissions.

In keeping with the carbon emission reduction goals of AB 32, the Division's Strategic Plan outlines the following long-term objective: Using the 2009-2010 fiscal year as a baseline, achieve a 25% reduction in carbon footprint from management of the SVRAs by 2020. The Division is currently working with SVRA staff to implement strategies and solutions to achieve this goal.

## **Solar Development**

Interest and investment in solar energy development is growing at a tremendous rate in California. This boom is due in large part to federal and state mandates to increase renewable energy production. In March 2009, the U.S. Secretary of the Interior signed an order directing the BLM

to make renewable energy production a top priority. In response, the California BLM developed a "fast track" system to expedite the permitting and processing of renewable energy projects.

The growth in solar energy projects in California is focused on the southern deserts, primarily on lands managed by the BLM. As of June 2010, over three dozen applications for large solar energy projects have been received or approved by the California BLM.



These projects have the potential to occupy over 200,000 acres of desert. This conversion of desert land will displace recreational uses which are currently permitted in these areas, including OHV recreation.



Proposals for new solar energy projects are expected to continue. The Commission will monitor these developments to evaluate impacts to OHV recreational opportunities, and ensure the recreational needs of Californians are given due consideration.



On a smaller scale, in 2008 Prairie City SVRA installed a solar-electric system on the roofs of its ETC and the visitor services entrance station. The solar units come with real-time digital meters allowing Prairie City staff to monitor facility performance and track energy usage. Total power generated, peak day, and total  $CO_2$  savings is recorded. The solar panels at Prairie City save over 14,000 KWH annually and, to date, over 120,000 pounds of  $CO_2$  emissions have been saved due to facility energy

upgrades. Not only do the solar panels generate over 100% of the electricity for the ETC, it offsets the electric cost of other buildings in the park as well. Prairie City SVRA receives a credit each month on its electric bill.

Hungry Valley and Ocotillo Wells SVRAs are also using the benefits of solar panels to generate power for various park facilities within their SVRAs.

### Wind Energy

Wind generated electrical power offers advantages and opportunities for the Division to reduce carbon footprint at the SVRAs. In looking at its portfolio of

options to reduce its carbon footprint, staff at Ocotillo Wells SVRA is currently analyzing the feasibility of using wind turbines to produce energy to power several of its facilities. The goal is to use wind energy to offset power usage for as many buildings as possible. The wind generators being considered will produce energy for less than the average cost of electricity.



### **Geothermal Development**

Federal lands providing OHV opportunities are under threat of closures and/or under severe use limitations as a result of conversions to renewable energy development including geothermal, wind, and solar. Decisions to allocate public lands for these activities threaten to reduce the amount of land available for OHV recreation and adversely impact other OHV areas in the state.

For example, a portion of BLM lands owned and managed throughout California are being explored and developed for geothermal resources. Over the last several years, the BLM has experienced an increase in demand for permits for energy development on their land. In response, they have issued several permits for geothermal exploration, drilling, and field development in California.

### **Ocotillo Wells SVRA**

Of particular interest to the Division is a major energy development project proposed in the Truckhaven area near the Salton Sea. The project is located within the boundaries of, and is managed by Ocotillo Wells SVRA. The BLM is considering developing geothermal leases on these 14,731 acres. As a result of this geothermal development, the Division is concerned these projects could negatively impact OHV opportunities, including reducing and/or restricting OHV access to certain areas of Ocotillo Wells SVRA during construction and operation of pro-



posed geothermal wells. The Division is also concerned about the possible impacts on water resources and ecosystem habitats.

As a result of these concerns, Ocotillo Wells SVRA staff is working closely with the BLM to assess impacts to OHV opportunity, and evaluate and develop mitigation measures to minimize impacts on the OHV community. Ocotillo Wells SVRA staff is monitoring this situation closely, and encouraging the BLM to evaluate resource management plans, analyze environmental impacts, and conduct cost benefit analysis to determine the appropriateness of specific project sites.

# **Recycling and Waste Reduction Programs**

Since the early 2000s, the Division and its SVRAs have increased solid waste recycling and decreased the tonnage going to landfills. The overall recycling rate has increased from below 20% in 2000 to over 50% in each of the past several years. Staff specialists are researching and looking to further improve recycling and waste disposal opportunities including collecting and evaluating data related to waste and consumption to raise the awareness of staff and visitors. In addition, several of the SVRAs have instituted creative recycling programs.

### Hungry Valley SVRA

Hungry Valley SVRA works with a local nonprofit to collect and recycle materials generated at the park. Volunteers from the local Boys and Girls Clubs collect the contents of the recycle bins located throughout the SVRA. The SVRA is provided with the weight information reported in accordance with AB 75 while the Boys and Girls Clubs keep the proceeds from the recycling.



#### **Ocotillo Wells SVRA**

Many OHV enthusiasts head to Ocotillo Wells SVRA to celebrate Thanksgiving Day and participate in the tradition of deep frying a Thanksgiving turkey. Ocotillo Wells staff collects the used cooking oil and recycles it to power their retrofitted Kubota RUV 1100. Staff drives the Kubota through the SVRA camping areas for trash pickup and on-site grease collection for much of the year. A grease recycling center is located next to the District Office for all visitors who wish to recycle their used vegetable oil.



# **Air Quality**

In recent years, air quality regulatory agencies at the state and federal level have begun to address concerns about the contribution of OHV recreation to fugitive dust emissions. There have been recorded instances of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) exceedances of maximum allowable ambient air quality standards measures in selected urbanized areas in proximity to park activities. The ambient air quality standards for particulate emissions are based on the determination that the emissions are a significant health problem for the public, particularly the elderly, children, and people with respiratory problems. The Division, as well as federal and local agencies, is under legal mandate and increasing pressure to take appropriate steps to implement effective measures that will reduce particulate emissions that arise from, or are aggravated by, OHV activities in the SVRAs.

#### Hollister Hills SVRA

At Hollister Hills SVRA staff developed and implemented an air quality monitoring program as part of general planning and CEQA compliance for new acquisitions at the park. This program provided baseline information on the sources and amount of dust from OHV activities and provides ongoing emissions data. Staff monitors dust impacts at locations selected in consultation with the Monterey Bay Unified Air Pollution Control District. This information is used for an adaptive management program, including a menu of possible management responses, if necessary, in areas identified as producing excessive dust emissions. To date, no exceedances of ambient air quality standards have been measured at the SVRA; the ongoing monitoring program will ensure that any changes in air quality conditions are addressed in a timely fashion as needed.

#### **Oceano Dunes SVRA**

At Oceano Dunes SVRA, over the past twenty years, the San Luis Obispo County Air Pollution Control District (SLOAPCD) has measured high levels of  $PM_{10}$  during high wind events on the Nipomo Mesa, which is directly downwind from the SVRA. The measured levels exceeded the State ambient air quality standard for  $PM_{10}$  on many days during the spring and fall. In a study released in 2010, the SLOAPCD concluded that a significantly higher level of particulate matter is emitted from the sand dune sheets at the SVRA that are disturbed by

OHV activity than is emitted from sand sheets that are not disturbed. The Division is working with the SLOAPCD and the County of San Luis Obispo (which owns a portion of the property being operated at the SVRA) in a voluntary collaborative process to: (1) more fully characterize the sources and levels of particulate matter arising from, or aggravated by, OHV activity; (2) design and implement pilot projects to test the effectiveness of measures to reduce those particulate emissions at the SVRA and on the Nipomo Mesa, and (3) based on the results of the pilot projects, develop a long-term particulate matter reduction plan for the SVRA.



#### **Ocotillo Wells SVRA**

In an action affecting Ocotillo Wells SVRA, the Federal EPA recently adopted its regulatory approval of the Imperial County Air Pollution Control District's (ICAPCD) State Improvement Plan (SIP) and implementing regulation regarding fugitive dust emissions. One of the conditions of approval was that an exception for open space areas may not include areas that are used for OHV activities. This EPA regulation not only affects the SVRA, but also BLM lands in the area, including BLM lands operated by the SVRA. The effect of the rule is that Best Available Control Measures must be implemented to address particulate emissions from the SVRA that contribute to measured exceedances of the federal ambient air quality standard for the region. The Attorney General, representing the Division, has responded with litigation to challenge the EPA rule and has joined the ICAPCD in its challenge. At the same time, the Division is working with the ICAPCD to design and implement a strategy to more fully characterize the sources and levels of particulate matter arising from the OHV activity at the SVRA and to identify and agree on Best Available Control Measures that will effectively address any share of particulate matter emissions that is determined to be the responsibility of the SVRA.

# **Alternative Fuel Vehicles**

The last several years have seen an increase in development and use of alternative fuel OHVs. In addition, highway-legal vehicles designed for off-highway use are now being offered by many manufacturers in flex-fuel and hybrid configurations. Some manufacturers are now offering fully electric motorcycles and four-wheeled vehicles for off-highway use. These electric vehicles



provide important opportunities for the public, the Division, and the future of OHV recreation. They produce minimal noise, use no fossil fuels directly, can be operated near urban areas with little sound disturbance to surrounding residents, and may present opportunities for development of OHV recreation areas in locations near urban centers.

California's Management Memo 06-03, Vehicle Purchase and Lease Policy, was released in 2006 as part of the state's efforts to meet ambient air quality standards and reduce the state fleet's

petroleum use and impact on the environment. This policy applies to the purchase and lease of light-duty, alternative fuel, gasoline, hybrid-electric, sport utility, and four-wheel drive vehicles. The Division and its SVRAs meet and exceed this mandate.

The Division recently purchased a small fleet of electric dual-sport motorcycles and electric RUVs. These vehicles provide fuel efficient, safe, and durable transportation for SVRA staff.

The purchase of these electric vehicles is a step in the right direction and is in line with the Division's education efforts and long-term strategy to meet the Governor's mandates, fulfill its Strategic Plan goals, and reduce its own—as well as California's—carbon footprint. The Division and the SVRAs are in an ideal position to promote zero emission OHVs to the public, and educate the public on reducing their own carbon footprint through such mechanisms as purchasing electric vehicles.



# Serpentinite Rock and Naturally Occurring Asbestos

The potential health and safety risks associated with exposure to naturally occurring asbestos (NOA) have recently gained increased regulatory attention throughout California. Consequently, much confusion has resulted from discussions and studies related to NOA and the rock type serpentinite. As a result of this unresolved issue, OHV recreational opportunities are being adversely affected by the closure and potential closure of public lands due to the perceived risks associated with NOA.





There is a common misconception that serpentinite is synonymous with NOA. There are many varied types and occurrences of serpentinite in California, and not all serpentinite contains NOA. Additionally, the amount of NOA that may be present within serpentinite varies depending on locality; and within any one locality the amount of NOA will also vary.

# **Expansion of Twentynine Palms Marine Corps Base**

In 2008, the U.S. Navy announced its interest to expand the Twentynine Palms Marine Corps Base. The military expansion would include development into Johnson Valley OHV Open Area, located southeast of Barstow. In 2008, the Marine Corps submitted an Application for Withdrawal of Public Lands to the BLM that includes approximately 422,000 acres. The expansion would impact a significant portion of the 188,000-acre Johnson Valley Open Area and have considerable repercussions for the OHV community as Johnson Valley is the largest, and one of the most popular OHV destinations in the county.

The Marine Corps is in the process of evaluating its options for base expansion. The BLM and the military are currently conducting an environmental analysis on the proposed use of the land. Expected completion of the draft EIS is spring 2011.

The Division is working closely with OHV recreation groups, BLM, and the military to assess alternatives and seek plausible solutions allowing for continued access to public lands for OHV recreation in the Johnson Valley OHV Open Area.

# **Recreational Trails Program**

The Recreational Trails Program (RTP) is administered through the Grants and Cooperative Agreements Program. The RTP was created by the federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), reauthorized in 1998 as part of the Transportation Equity Act for the 21st Century (TEA-21), and reauthorized again in 2005 through the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The RTP is a federal assistance program of the United States Department of Transportation's Federal Highway Administration (FHWA) that provides funds to the states to develop and main-





tain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses.

The funds are distributed to the states by legislative formula: half of the funds are distributed equally among all states, and half are distributed in proportion to the estimated amount of non-highway recreational fuel use in each state. In California, non-motorized RTP projects are administered by the Office of Grants and Local Services (OGALS), while motorized projects are administered by the Division.

California receives on average \$5.3 million per year for the

RTP. From the total amount received, approximately \$1.3 million per year is allocated for motorized recreation projects. RTP projects are awarded fund-

ing based on a competitive application process. Eligible applicants include cities, counties, districts, state agencies, federal agencies, and nonprofit organizations with management responsibilities over public lands.

An example of an RTP funded project involved the installation of route signs, informational kiosks, and fences in the OHV areas of BLM Ridgecrest. Project activities were developed to encourage on-trail travel and support resource protection.



In addition, the motorized portion of the RTP has helped:

Educate California youth on the safe operation of OHVs

- Produce numerous OHV maps and touring guides
- Install restroom facilities in the BLM Barstow and Ridgecrest OHV areas
- Construct snowmobile trailheads on the Lassen National Forest

# 2009 Winter Trailhead Survey

During the 2008-2009 winter season, the Division contracted with CSUS to conduct a visitor survey at 11 trailheads to obtain accurate baseline information on winter recreation trail use. In all,

413 individual visitors participated in the survey. The study will continue through the 2012-2013 winter season.

This study represents an effort by the Division to collect current information about visitors who use the snowmobile trailheads for recreation. The data is collected for a variety of reasons which informs management decisions and provides information to assist the Division in its environmental planning needs. The study will also provide data related to characteristics of trail users, recreation patterns, and resource impacts as well as trend analysis of winter recreation in the OSV Program.



# **Over Snow Vehicle Program Environmental Impact Report**

To support motorized winter recreation, the Division supports a system of trailheads and groomed trails for snowmobile use.



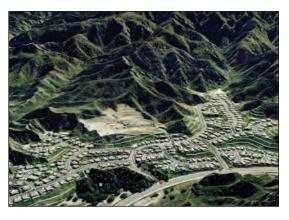
The Division provides funding to 11 National Forests and three County Public Works/Road Departments for the operation, maintenance, and grooming of winter recreation trails and trailheads in California. The trails are maintained for snowmobile or OSV use; however, Nordic skiers, mushers (driving dog sleds) and snowshoers also use the parking areas and groomed trail systems.

In 2009, the Division began the process of modifying the OSV Program from an annual consideration to a 10-year funding commitment from 2010-2020. In so doing, the Division prepared a Draft EIR for CEQA compliance. The EIR identified the potentially significant environmental

impacts of over snow activity and provided mitigation measures where appropriate. The Final EIR was completed in December 2010.

#### **Urban Encroachment**

Urbanization over the last ten years has created conflicts in many existing managed OHV recreation areas which were once far removed from housing and commercial development. As more homes and businesses are built in these remote areas, the remaining lands available for OHV opportunity are receiving increased use, potentially resulting in impacts to recreational opportunity, the outdoors experience, and cultural and natural resources. Conflicts between OHV recreation use and neighboring land owners have become a management issue,



particularly in relation to noise, dust, and trespass onto private land. OHV opportunities are increasingly threatened due to land use allocations and regulations, zoning laws, and increased concern for environmental impacts.

#### **USFS Travel Management in California**

In 2000-2001, through the Grants Program, the Division began awarding funding to individual forests for route designation. As OHV recreation continued to increase, the USFS recognized the impacts from cross-country travel on open forest lands throughout California were resulting



in an unacceptable level of environmental damage. It became increasingly evident that a managed system of roads, trails, and areas was necessary on USFS lands.

In August 2003, the USFS entered into a Memorandum of Intent with the Commission and the Division for the purpose of establishing a common goal to achieve route designation and the regulation of motorized vehicles within USFS managed lands in California.

In 2005, the USFS issued a national framework for local forests to designate a sustainable system of roads, trails, and areas for public motor vehicle use. In order to align with the new national framework, route designation became Travel Management.

Currently, the USFS in California is working through a Travel Management process. This process is the first step in implementing the National Travel Management Rule which is resulting in the publication of Motor Vehicle Use Maps (MVUMs) that identify the roads, trails, and areas open to

public motor vehicle use on every National Forest. The MVUMs are required to meet a national standard showing only designated roads, trails, and areas.

There are three parts to the Travel Management Rule: Subpart A (Administration of the Forest Transportation System), Subpart B (Designation of Roads, Trails, and Areas for Motor Vehicle Use), and Subpart C (Use by OSVs). The National Forests have been working to complete Subpart B and have begun work on Subpart A.

National Forests throughout California collaborated with the public (both motorized and nonmotorized recreationists) to identify roads, trails, and areas for designation as part of the National Forest Transportation System.

During the inventory phase of Travel Management in the Pacific Southwest Region, 14,000 miles of unauthorized routes were inventoried. Of those miles, 10,255 miles of unauthorized routes were considered and evaluated as part of the Travel Management process. At the completion of the Travel Management process (18 National Forests), 1,868 miles of unauthorized routes were added for OHV use and are broken down as follows:

- 1,024 miles of Maintenance Level 2 (ML2) Roads moderately developed non-highway legal
- 11 miles of Maintenance Level 3 (ML3) Roads developed highway legal
- 844 miles of Motorized Trails

Management decisions and MVUMs represent the first steps in the long process of implementing the Travel Management Rule to reduce the environmental impacts associated with public motor vehicle use on National Forests, and develop a sustainable transportation system.

For the past seven years the Commission and Division, in collaboration with Region 5 of the USFS, have supported route inventorying and travel management planning through grant funding. To date approximately \$12 million has been awarded through the cooperative agreement process. The USFS recognizes that Travel Management planning will change the way that people access and experience National Forests. Nevertheless, this change must occur in order to provide long-term OHV opportunities for OHV recreation, and for protection of natural and cultural resources.

Seventeen of the 18 National Forests have completed their Final EISs and Record of Decisions (ROD). The remaining forest anticipates completing its Final EIS and ROD by early 2011.

## **CONCLUSION AND NEXT STEPS**

The OHMVR Program has made great strides in recent years in improving management of areas set aside for OHV recreation, and advancing the protection of the natural and cultural resources. In order for the Program to meet its mandate of providing sustainable OHV recreation, it must focus on such issues as ensuring clean air and water, preventing accelerated erosion, and maintaining a healthy ecosystem. However, in order to sustain a program which truly protects these resources for the long term, while providing sustainable OHV recreation, a particular focus must be placed on the human element.

Only by working to bring disparate communities of interest together to combine their efforts for the common cause of caring for the environment and recreational opportunities found there, can the Program continue to be successful. As the Program evolves, increased focus will be placed on education, working with stakeholders, and inspiring all who value California's natural areas.

Change is difficult for any organization, and the changes experienced by the OHMVR Program over the past five years have been dramatic. The 2005 BSA Audit pointed out significant flaws in the Program. Much of the past five years have been spent rebuilding a Program based on the guiding principles outlined in the Strategic Plan: sustainability; transparency in decision making; working with partners and volunteers; considering the needs and concerns of stakeholders; and decisions based on sound data.

The challenge of providing high-quality OHV recreation, while maintaining environmental protections, can be daunting. Difficult issues must be thoughtfully considered and addressed, and public participation in this process is essential.

The successes discussed in this Report were achieved thanks to the dedicated efforts of OHV enthusiasts, communities of interest, dedicated staff, and leadership from a variety of individuals and organizations who were willing to rebuild an organization focused on accountability, transparency, and customer service.

Challenges that exist in today's Program can be addressed by engaging the talents and energies of these hard working individuals. The important role of organized groups, including OHV clubs and environmental organizations, cannot be overstated. Partners from other local, state, and federal governmental agencies are also critical to future success. By being transparent, inclusive, and considerate of all points of view, the OHMVR Program will continue to serve the people of California by providing high quality, sustainable recreation opportunities.

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# **GLOSSARY OF TERMS AND ABBREVIATIONS**

| AB                  | Assembly Bill                                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACEC                | Area of Critical Environmental Concern (BLM)                                                                                                                                                |
| ADA                 | Americans with Disabilities Act                                                                                                                                                             |
| Adaptive Management | A type of natural resource management in which decisions are made as part of an ongoing science-based process                                                                               |
| ASC                 | Anthropological Studies Center                                                                                                                                                              |
| ASCAR               | Archaeological Site Condition Assessment Reports                                                                                                                                            |
| ATV                 | All-Terrain Vehicle                                                                                                                                                                         |
| BCP                 | Budget Change Proposal                                                                                                                                                                      |
| BLM                 | Bureau of Land Management                                                                                                                                                                   |
| BMP                 | Best Management Practice                                                                                                                                                                    |
| BSA                 | Bureau of State Audits                                                                                                                                                                      |
| California Register | California Register of Historic Resources                                                                                                                                                   |
| CAO                 | Cleanup and Abatement Order                                                                                                                                                                 |
| Carbon Emission     | Energy-related carbon dioxide emissions, resulting from the com-<br>bustion of petroleum, coal, and natural gas                                                                             |
| Carbon Footprint    | The total set of greenhouse gas emissions (including carbon diox-<br>ide, methane, and nitrous oxide) caused directly and indirectly by<br>an individual, or product (UK Carbon Trust 2008) |
| CASSP               | California Archaeological Site Stewardship Program                                                                                                                                          |
| CAT                 | Collaborative Alternative Team                                                                                                                                                              |
| CAT                 | Collaborative Alternative Team                                                                                                                                                              |
| сс                  | Cubic Centimeter                                                                                                                                                                            |
| CCMA                | Clear Creek Management Area                                                                                                                                                                 |
| CCR                 | California Code of Regulations                                                                                                                                                              |
| CCR                 | California Code of Regulations                                                                                                                                                              |
| CDFG                | California Department of Fish and Game                                                                                                                                                      |

| CDWR       | California Department of Water Resources        |
|------------|-------------------------------------------------|
| CEQA       | California Environmental Quality Act            |
| CESA       | Conservation and Enforcement Services Account   |
| CFR        | Code of Federal Regulations                     |
| CGS        | California Geological Survey                    |
| CHP        | California Highway Patrol                       |
| CNDDB      | California Natural Diversity Database           |
| СО         | Carbon Monoxide                                 |
| CO2        | Carbon Dioxide                                  |
| Commission | Off-Highway Motor Vehicle Recreation Commission |
| CSA        | Cost Share Agreements                           |
| CSP        | California State Parks                          |
| CSUMB      | California State University, Monterey Bay       |
| CSUS       | California State University, Sacramento         |
| CVC        | California Vehicle Code                         |
| Division   | Off-Highway Motor Vehicle Recreation Division   |
| DMV        | Department of Motor Vehicles                    |
| DOC        | California Department of Conservation           |
| DOF        | Department of Finance                           |
| EDD        | California Employment Development Department    |
| EIR        | Environmental Impact Report                     |
| EIS        | Environmental Impact Statement                  |
| Endemic    | Native to or confined to a certain region       |
| EPA        | Environmental Protection Agency                 |
| ETC        | Environmental Training Center                   |
| FSM        | USFS Manual                                     |
| FY         | Fiscal Year                                     |
|            |                                                 |

| GIS               | Geographic Information System                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GMP               | Grazing Management Plan                                                                                                                                         |
| GPS               | Global Positioning System                                                                                                                                       |
| HCP               | Habitat Conservation Plan                                                                                                                                       |
| HMP               | Habitat Monitoring Plan                                                                                                                                         |
| HMS               | Habitat Monitoring System                                                                                                                                       |
| ICAPCD            | Imperial County Air Pollution Control District                                                                                                                  |
| ISDRA             | Imperial Sand Dunes Recreation Area                                                                                                                             |
| MOU               | Memorandum of Understanding                                                                                                                                     |
| MVFA              | Motor Vehicle Fuel Account                                                                                                                                      |
| MVUM              | Motor Vehicle Use Map                                                                                                                                           |
| National Register | National Register of Historic Places                                                                                                                            |
| NEPA              | National Environmental Policy Act                                                                                                                               |
| NFS               | National Forest System                                                                                                                                          |
| NGMA              | Native Grasslands Management Area                                                                                                                               |
| NHPA              | National Historic Preservation                                                                                                                                  |
| NOA               | Naturally Occurring Asbestos                                                                                                                                    |
| Non-Use Area      | OHV/OSV use is prohibited (USFS)                                                                                                                                |
| Off-Road PALs     | Youth Education Program offered through the Division featuring ATV, dirt bike, and snowmobile classes teaching safe operation and environmental responsibility. |
| OGALS             | Office of Grants and Local Services                                                                                                                             |
| OHMVR Act         | Off-Highway Motor Vehicle Recreation Act of 2003                                                                                                                |
| OHMVR Division    | Off-Highway Motor Vehicle Recreation Division                                                                                                                   |
| OHV               | Off-Highway Vehicle                                                                                                                                             |
| OLGA              | On-Line Grant Application                                                                                                                                       |
| OSV               | Over-Snow Vehicle                                                                                                                                               |
| PAL               | Police Academy League                                                                                                                                           |
|                   |                                                                                                                                                                 |

| PM           | Particulate matter less than or equal to 10 microns in diameter                                                                                                                                                                                                          |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRBO         | Point Reyes Bird Observatory                                                                                                                                                                                                                                             |
| PRC          | Public Resources Code                                                                                                                                                                                                                                                    |
| Program      | Off-Highway Motor Vehicle Recreation Program                                                                                                                                                                                                                             |
| Public Lands | Federal, state, county or city-owned or administered lands,                                                                                                                                                                                                              |
| RAMP         | Recreational Area Management Plan                                                                                                                                                                                                                                        |
| Restoration  | Upon closure of the unit or any portion thereof, the restoration<br>of land to the contours, the plant communities, and plant covers<br>comparable to those on surrounding lands, or at least those that<br>existed prior to off-highway motor vehicle use (PRC 5090.11) |
| Roads        | Logging roads, service roads regardless of surface composition, or other roughly graded trails and roads upon which vehicular travel is permitted. (CVC 38001)                                                                                                           |
| ROC          | Rubicon Oversight Committee                                                                                                                                                                                                                                              |
| ROD          | Record of Decision                                                                                                                                                                                                                                                       |
| RTC          | Revenue and Taxation Code                                                                                                                                                                                                                                                |
| RTF          | Rubicon Trail Foundation                                                                                                                                                                                                                                                 |
| RTP          | Recreational Trails Program                                                                                                                                                                                                                                              |
| RUV          | Recreational Utility Vehicle                                                                                                                                                                                                                                             |
| RWQCB        | Regional Water Quality Control Board                                                                                                                                                                                                                                     |
| SACRF        | State Archeological Collections and Research Facility                                                                                                                                                                                                                    |
| SB 742       | Senate Bill 742 enacted in 2008 extended OHMVR Program sunset to January 1, 2018                                                                                                                                                                                         |
| SDSU         | San Diego State University                                                                                                                                                                                                                                               |
| SFGPF        | State Fish and Game Preservation Fund                                                                                                                                                                                                                                    |
| SIP          | State Improvement Plan                                                                                                                                                                                                                                                   |
| SLOAPCD      | San Luis Obispo County Air Pollution Control District                                                                                                                                                                                                                    |
| SNO-PARK     | A snow cleared parking lot with sanitation facilities and access to snow play areas, cross country ski and snowmobile trails.                                                                                                                                            |

| SRMA     | Special Recreation Management Area         |
|----------|--------------------------------------------|
| SVRA     | State Vehicular Recreation Area            |
| SWRCB    | State Water Resources Control Board        |
| ТМО      | Trail Management Objective                 |
| TRAC     | Trail Assessment and Condition Surveys     |
| UC       | University of California                   |
| UCD      | University of California, Davis            |
| Use Area | OHV/OSV use is legal and encouraged (USFS) |
| USDA     | United States Department of Agriculture    |
| USFS     | United States Forest Service               |
| USFWS    | United States Fish and Wildlife Service    |
| VORRA    | Valley Off-Road Racing Association         |
| WHPP     | Wildlife Habitat Protection Program        |



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