

NATURAL RESOURCES

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NATURAL RESOURCES

0300 INTRODUCTION

This chapter is the basic natural resource policy document for the State Park System and supercedes all previous related policy documents. Future natural resource-related policy modifications or changes may occur in the form of Departmental Notices. The policies, definitions, processes, and procedures contained in this chapter guide the management of the natural resources under the jurisdiction of the Department of Parks and Recreation, including naturally occurring physical and biological resources and associated intangible values, such as natural sounds and scenic qualities. The chapter guides and directs the various programs of the Department that affect the recognition, protection, restoration, and maintenance of the natural resources so that their heritage values may be effectively perpetuated and enjoyed by present and future generations of State Park System visitors.

Policy direction in this chapter may be general or specific. All Departmental policy is set forth in writing, approved and issued by the Department, and published or otherwise made available to those whom it affects and those who must implement it. Adherence to policy will be mandatory unless waived or modified by the Director or designee. Policy waivers and modifications will be considered on a case-by-case basis, and previous waivers or modifications should not necessarily be regarded as precedents for similar waivers or modifications. Unwritten or informal "policy" and various understandings of traditional practices must not be relied on as official policy.

The National Park Service's Natural Resources Management Guideline, NPS-77; Management Policies, 1988; and Management Policies 2001, Natural Resource Management were consulted in development of this chapter. This chapter also incorporates Resource Management Directives for the California Department of Parks and Recreation, November, 1981.

0301 AUTHORITY AND JURISDICTION

The management of the California State Park System is guided by the State Constitution, the applicable codes of California Law, proclamations, executive orders, the California Code of Regulations (CCR), Department Notices and policies of the California State Park and Recreation Commission. Resource management policy must be consistent with these authorities and with appropriate delegations of authority. Many of the statutes and other guidance affecting the various facets of this management are cited for reference purposes throughout the policies in the following chapter. Public Resources Code (PRC) Division 1, Chapter 1, Article 1 and Division 5, Chapter 1, Article 1 provide general authority to the Department to administer, protect, develop and interpret the lands of the State Park System.

The Department's natural resources management policies apply to all units of the State Park System that contain natural resources. Except when subject to pre-existing contract language, park tenants, including concessionaires, cooperating associations, lessees, employees, local government or private operators, and other park partners, including friends and docent groups, user groups, and advocacy groups shall adhere to the Department's natural resources management policies as described in this chapter. On lands that are owned by other agencies but operated by the Department, such as U.S. Bureau of Reclamation or California Department of Water Resources lands at inland reservoirs, the Department's natural resources management policies should be applied as described in this chapter unless legal requirements such as federal statutes or property leases dictate otherwise.

The Department's management jurisdiction goes beyond the simple two-dimensional surface boundary of a park system unit. The extent of jurisdiction includes the full column, inclusive of air space above the unit through and below the site's surface (Civil Code § 659). This fee-simple, absolute concept is a common real property application and is only modified by

certain reservations (such as easements or mineral rights) and other governmental authorities such as air-space regulation by the Federal Aviation Commission or California's regulatory authority.

It is important for State Park System property managers to be aware of limitations and protections afforded the various park classifications employed in the State Park System with regard to the overall extent of the Department's management jurisdiction. For instance, in the case of wilderness areas of the State Wilderness Preservation System, aircraft are prohibited from flying lower than 2000 feet above the ground [PRC § 5093.36(b)]. In another example, the California Department of Fish and Game regulates commercial and sport fishing and kelp harvesting within the water column of marine managed areas of the State Park System. All other applicable statutes and regulations normally administered by the Department apply in such areas.

0302 NATURAL RESOURCES HANDBOOK

The Department Operations Manual is supplemented by the Natural Resources Handbook, which contains information about resource management operations, processes, and procedures. The Chief of the Natural Resources Division is responsible for updating the Natural Resources Handbook. Additional guidelines pertaining to district operations may be found in their respective district operation guidelines.

0303 DEPARTMENT NATURAL RESOURCE RESPONSIBILITY

The Department's natural resource responsibility is to acquire, protect, restore, maintain and sustain outstanding and representative examples of California's natural and scenic values for the benefit of present and future generations.

0303.1 Organizational Unit Responsibilities

Responsibility for natural resources is vested throughout the Department. The following sub-sections describe the responsibility and authority of the various levels of the Department. These roles are described more specifically throughout this chapter.

0303.1.2 Natural Resources Division

The Natural Resources Division provides overall leadership and direction to the Department's natural resources management program, including systemwide planning, natural resource program management, preparation of policy and guidelines, and service to the districts and service centers. In addition, the Division contributes to conservation of California's natural resources through participation in statewide and regional efforts. The Division also oversees Departmental compliance with the California Environmental Quality Act (CEQA).

While working closely with the districts and service centers, the Natural Resources Division prepares and maintains the items presented in the following sub-sections, and ensures their availability to the appropriate Departmental units as well as entities outside the Department.

0303.1.2.1 Division Natural Resource Management Planning, Priorities and Documentation

0303.1.2.1.1 Planning

- a. Natural Resources Program Guidance and Improvement: Review program effectiveness, develop and maintain standards and fill program gaps and needs.
- b. Representative Parks and Watersheds: Maintain listings and update reports identifying selected watersheds and park units most representative of values of the ecological regions.
- c. Representative Habitat Types: Maintain listings, maps and reports on representative examples of all major habitat types in the State Park System.
- d. Acquisition Planning: Maintain current listing of characteristics and features of priority natural resource acquisition for the State Park System.

- e. Natural Resource Management Work Plans: Annually develop and maintain one-year and five-year work plans for natural resource management in the State Park System.

0303.1.2.1.2 Establishing Priorities

- a. Overall Natural Resource Program Support: Establish criteria, evaluate needs and recommend staffing and project funding priorities.
- b. Acquisition Priorities: Maintain a prioritized list of proposed acquisitions based upon their overall or specific natural resource value.
- c. Condition Assessment: Establish and maintain five-year priorities for updating condition assessments for park and management units.
- d. Restoration/Stewardship Projects: Maintain criteria for project selection and prioritization for restoration and stewardship projects, including prescribed burning projects.
- e. Inventory, Monitoring and Assessment Program: Maintain current priorities for IMAP efforts by unit and, when appropriate, subject matter.
- f. Unit General Plans: Maintain natural resource priority listings for General Plans and classification work.
- g. External Participation: Maintain priorities for participation by the Division in external working groups contributing to natural resource conservation in California.

0303.1.2.1.3 Documentation

The following systemwide information and program management documentation is maintained by the Division and made available within the Department:

- a. Statewide Scientific Collecting Permits
- b. Systemwide natural resource databases such as CalPark Flora and CalPark Fauna
- c. Natural Resource Condition Assessment
- d. Natural resource management project information (past, present and future)
- e. Natural resource maintenance program information including Management Unit data and natural resource maintenance activities and expenditures
- f. Natural Resource Specialists Experience Catalogue
- g. CEQA log distribution database
- h. Park Infrastructure Database (PID) natural resource projects
- i. Unit aerial photographic library

0303.1.3 Districts

Districts represent the focal point for the protection, management, and stewardship of natural resources for park units. A district natural resource program should be developed, prioritized, and managed on a district-wide basis. Whether reporting in sectors or at the district office, natural resource staff should be utilized throughout the district to maximize program effectiveness and meet the diverse demands of natural resource management issues.

Districts design and implement natural resource management programs, plans, and projects; ensure that all projects and activities on Department-operated lands are in compliance with environmental and land use regulations and laws; and identify and conduct routine maintenance to protect the health and condition of natural resources in units of the State Park System.

0303.1.3.1 District Natural Resource Management Planning, Priorities and Documentation

A complete and defensible natural resources program, whether in a district, the Natural Resources Division or the Department, should include thoughtful planning, identification of priorities and documentation to ensure protection, management and stewardship of park natural resources. These components of an entity's natural resources program should be written and/or mapped to ensure important natural resources management planning, priorities and documentation are accessible to appropriate district staff, provide continuity into the future, and facilitate smooth future staff transition.

Each district will prepare and maintain the information in the sub-sections below, and ensure its availability to appropriate district and other Departmental staff. The Natural Resources Division will assist districts by providing standardized format where appropriate.

0303.1.3.1.1 Planning

- a. Exotic species control: Develop and maintain a written strategy for the removal of priority exotic species from priority areas within the district.
- b. Unit prescribed burn plans: Prepare unit prescribed fire management plans for appropriate park units.
- c. Unit wildfire management plans: Maintain schedule for updating all necessary wildfire management plans.
- d. District natural resource management planning: Annually develop and maintain written one-year and five-year work plans for natural resource management for the district.
- e. Recent acquisitions:
 - Identify most urgent natural resource management needs.
 - Integrate information for newly acquired properties where appropriate.
 - Identify natural resource Management Units (MUs) and complete a Condition Assessment.

0303.1.3.1.2 Establishing Priorities

- a. Natural resource inventories: Prioritize inventory needs for parks or management units as described in the Inventory, Monitoring and Assessment Program (IMAP) manual.
- b. Unit General Plans: Maintain an updated prioritized list of General Plan needs based on natural resource management.
- c. Exotic species control: Maintain district and park unit priority listings for individual projects and maintenance efforts.
- d. Prescribed burn priorities: Maintain current five-year priority schedule for district prescribed burn projects.
- e. IMAP needs: Identify and prioritize park area monitoring needs per IMAP.
- f. External areas of potential threat: Identify and monitor priority external areas where land-use decisions or practices may substantially impact key areas of park biodiversity, e.g. fragmentation, urban impacts, conversions within key watersheds.
- g. Non-point source pollution: Maintain and update list of significant areas/sources of natural and facilities-related non-point source pollution.
- h. Acquisition priorities: Maintain an updated prioritized list of proposed natural resource-based acquisitions.

0303.1.3.1.3 Documentation

- a. Regional conservation planning: Maintain copies of all relevant regional conservation plans associated with parks.
- b. Unit General Plans and unit policies: Maintain copies of all General Plans and natural resource policies for units within the district.
- c. Maintenance recordation: Record maintenance activities in the Department's computerized maintenance management system, Maximo, and close work orders at the end of each fiscal year.
- d. Land use impediments: Maintain listing of land use impediments for all parks, including all forms of easements, rights of way, deed restrictions, leases, and active long-term permits (e.g., right of entry).
- e. Water rights: Maintain listing of all Departmental appropriative water rights, within and outside of parks, and third party appropriative water rights within parks and outside of parks where appropriation may significantly impact park aquatic systems.
- f. Prescribed Burn and Wildfire Summaries: Maintain summaries and mapping data of all prescribed burns and wildfires.
- g. Park Infrastructure Database (PID): Maintain and update natural resource project needs in PID including project priorities and rankings.
- h. Project log: Maintain a current log of all past funded natural resource management projects for each park; use Natural Resources Division listings, beginning in 1980, and PID for latest projects.

- i. Current scientific research: Maintain hard copies of all scientific collecting permits.
- j. Management Unit Data Sheets: Maintain management unit data for forecasting natural resource maintenance.
- k. Condition Assessment: Update park unit condition information as appropriate.
- l. Equipment:
 - Maintain a current inventory of all equipment used for natural resource management.
 - Maintain listing of new equipment needs.
- m. Aerial Photographic Holdings: Maintain an accurate, retrievable index of aerial photography on file in the district.

0303.1.4 Park Operations

Park Operations is the entity within the Department that manages all field operations and the Facilities Support, Public Safety, Concessions, Interpretation and Education, Natural Resources, and Cultural Resources Divisions.

0303.1.5 Acquisition and Development Division

The Acquisition and Development Division provides Department-wide services related to natural resource management including coordination of the development of General Plans for State Park System units and developing and maintaining information on natural resource properties for addition to the State Park System.

0303.1.6 Off-Highway Motor Vehicle Recreation Division

The Off-Highway Motor Vehicle Recreation (OHMVR) Division is responsible for the inventory, stewardship and management of the natural resources of the State Vehicular Recreation Area (SVRA) and Trail System. The OHMVR Division develops specific mitigation to conserve resources in the SVRA and Trail System and minimizes deleterious impact on the environment, wildlife habitats, native wildlife and flora of these areas by providing support to field units in resource management.

0303.1.7 Planning Division

The Planning Division performs long-range planning studies to determine statewide needs for the preservation of significant natural resources through preparation of the California Outdoor Recreation Resources Plan and the State Park System Plan and provides guidance and technical assistance with regard to resource management trends.

0303.1.8 Interpretation and Education Division

The Interpretation and Education Division is responsible for providing coordination and technical support for natural resources interpretation.

0304 GENERAL MANAGEMENT DIRECTION

Management decisions made by application of natural resource policy direction in this document must always take into account any higher order policy direction provided in the Public Resources Code (PRC).

Policy direction provided in this chapter is largely based on the premise that the lands involved have natural resources management as a primary management goal, along with some level of visitor use, as appropriate.

Most of the policies in this chapter provide general direction for natural resources management. The Department's planning and decision making processes (e.g. general and management planning, 5024 reviews, and CEQA) are designed to resolve conflicts between cultural resources, outdoor recreation and operational needs on a case by case basis.

Management direction is also provided for circumstances where protecting natural resources may be a secondary goal, for example in a campground where the primary purpose is to maintain a visitor facility in as natural a setting as possible.

In this chapter, natural resources, processes, systems, and values are all included in the term “natural resources”. These include:

- Physical resources such as water, air, soils, topographic features, geologic features, and paleontological resources;
- Physical processes such as weather, precipitation, runoff, erosion, deposition, tidal action and wildfire;
- Biological resources such as native plants, animals, and communities;
- Biological processes such as natural succession, and evolution; and
- Associated attributes such as natural sounds, solitude, clear night skies, and scenic vistas.

The term “native” or the term “natural,” when referring to native plant and animal communities or natural processes, refers to those organisms and processes that have co-evolved in the California landscape for thousands of years and were present in California prior to Euro-American modifications.

0304.1 Management Concepts and Principles

Natural resources management is guided by broad concepts and principles in those areas where natural resources are a primary management focus. These concepts and principles include:

- **Composite Whole:** Natural resources will be managed to preserve the composite whole of physical and biological processes, features, and native plant and animal communities except where the management purpose is otherwise established through unit classification or General Plan. Generally, this includes maintaining all the components and processes of naturally evolving park ecosystems, and the natural abundance, diversity, genetic and ecological integrity of the plant and animal species native to those ecosystems. The Department will not attempt to solely preserve individual species except threatened or endangered species in special situations.
- **Natural Change:** Just as all components of a natural system will be recognized as important, natural change will also be recognized as an integral part of the functioning of natural systems.
- **Natural Processes:** Whenever possible, natural processes will be relied upon to maintain native plant and animal species, and to influence natural fluctuations in populations of these species. However, biological or physical processes altered by human activities often need to be restored to a natural condition or to the closest approximation of the natural condition through management intervention. The Department will seek to return human-disturbed areas to natural conditions characteristic of the area in which the damaged resources are situated. Prescription burning to restore natural fire cycles after decades of wildfire suppression is one example.
- **Natural Phenomena:** Natural occurrences such as floods, fires, landslides, earthquakes, diseases, and other stresses are also recognized as integral to the proper functioning of ecosystems. Landscapes disturbed by such natural phenomena will be allowed to recover naturally unless management is necessary to protect park values or for human health and safety.
- **Landscape Linkages:** In many cases, maintaining the integrity of natural processes and elements in park units will require suitable linkages or corridors between parks and other protected lands. Linkages serve to connect existing protected areas, facilitate wildlife movement and botanical transfer, and result in combined acreage large enough to sustain healthy plant and animal populations over the long-term.

- **External Impacts:** Activities that take place outside park boundaries sometimes have profound effects on the ability to protect natural resources inside parks. The Department must act to protect natural resources from impacts caused by external activities through various strategies including working cooperatively with other agencies and landowners.
- **Public Use:** In addition to preserving natural values, the management of natural resources is clearly for the enjoyment and inspiration of present and future generations. Toward this end public use and access is guided at acceptable levels and at appropriate locations so as to perpetuate important natural values. In addition, the visitor's experience will be considered in planning for and conducting natural resource management activities.

In varying degrees, the natural resources of the State Park System are continually influenced by artificial conditions or direct alterations. If left alone, many natural resources and the park values they impart would be degraded and lost over time.

0304.2 Unit Classification – the Foundation

The term "State Park" is the traditional name by which all units of the State Park System (except for historical monuments) were known before the 1960's. In 1961, legislation was adopted that established, defined, and described the different classifications of units of the State Park System.

The foundation for the Department's management approach for any particular unit is based on the unit classification statutes as specified in the Public Resource Code (PRC § 5019.50 - 5019.80) and specific direction provided in the unit's General Plan. The statutes set forth the primary purpose of each type of classified unit, identify in general what types of facilities and uses may be permitted, and provide direction on how unit resources shall be managed.

Natural resource protection is a primary management goal for units classified as State Reserves or State Parks and for sub-units classified as Natural Preserves or State Wildernesses. A main goal for these units is to protect and restore natural ecological processes and features, except as otherwise specifically directed. Natural resource management emphasis for other classified areas, such as State Recreation Areas, State Beaches, and State Historic Parks, varies depending on primary and secondary goals under their particular classifications and any additional objectives included in the units' General Plans.

The following sub-sections paraphrase natural resource-related policy direction in the major classification statutes.

0304.2.1 State Natural Reserve

State Natural Reserves [PRC § 5019.65 (a)] consist of areas selected and managed for the purpose of preserving their native ecological associations, unique faunal or floral characteristics, geological features, and scenic qualities in a condition of undisturbed integrity.

Resource manipulation shall be restricted to the minimum required to negate the deleterious influence of humans.

Improvements undertaken shall be for the purpose of making the areas available, on a day use basis, for public enjoyment and education in a manner consistent with the preservation of their natural features. Living and nonliving resources contained within State Natural Reserves shall not be disturbed or removed for other than scientific or management purposes. Motor vehicle use in State Natural Reserves is confined to paved areas and other areas specifically designed and maintained for normal ingress, egress and parking (see DOM Section 0304.5.2).

0304.2.2 State Marine Reserve

State Marine Reserves [PRC § 5019.80 (a) (1)] are non-terrestrial marine or estuarine areas managed to: (1) protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas; (2) protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems; (3) protect or restore diverse marine gene pools; and/or (4) contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems.

It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource in a State Marine Reserve, except under a permit or specific authorization from the managing agency for research, restoration, or monitoring purposes.

State Marine Reserves shall be open to the public for enjoyment and study to the extent feasible; however, they shall be maintained in an undisturbed and unpolluted state to the extent practicable. Access and use for activities such as walking, swimming, boating, and diving may be restricted to protect marine resources. Research, restoration, and monitoring may be permitted. Educational activities and other forms of non-consumptive human uses may be permitted in a manner consistent with the protection of all marine resources.

0304.2.3 State Park

State Parks [PRC § 5019.53] consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other such values.

The purpose of State Parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant and representative examples of ecological regions.

A State Park shall be managed as a composite whole, with all features and processes being considered, in order to restore, protect, and maintain its native environmental composition to the extent compatible with the primary purpose for which the park was established.

Improvements undertaken within State Parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, sightseeing, nature study, hiking, and horseback riding, so long as such improvements involve no major modification of lands, forests, or waters. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves (see DOM Section 0317.1.2), or which are otherwise available to the public within a reasonable distance outside the park, shall not be undertaken within State Parks. Motor vehicle use in State Parks is confined to paved areas and other areas specifically designed and maintained for normal ingress, egress and parking (see DOM Section 0304.5.2).

0304.2.4 State Marine Park

State Marine Parks [PRC § 5019.80 (a) (2)] consist of non-terrestrial marine or estuarine areas managed to: (1) protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems; (2) contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding representative or imperiled marine habitats or ecosystems; (3) preserve cultural objects of historical, archaeological, and scientific interest in marine areas, and/or; (4) preserve outstanding or unique geological features. Areas may also provide opportunities for spiritual, scientific, educational, and recreational opportunities.

Public use, enjoyment, and education are encouraged in State Marine Parks in a manner consistent with protecting resource values.

It is unlawful to injure, damage, take, or possess any living or nonliving marine resource for commercial exploitation purposes in State Marine Parks. Any human use that would compromise protection of the species of interest, natural community or habitat, or geological, cultural, or recreational features, may be restricted. Other uses are allowed, including scientific collection with a permit, research, monitoring, and public recreation, including recreational harvest, unless otherwise restricted.

0304.2.5 Natural Preserve

Natural Preserves [PRC § 5019.71] are distinct areas of outstanding natural or scientific significance established within the boundaries of other State Park System units.

The purpose of Natural Preserves shall be to preserve such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of plant or animal communities existing in California prior to the impact of Euro-American modifications, geological features illustrative of geological processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns.

Natural Preserves shall be managed to allow natural dynamics of ecological interaction to continue without interference, where possible. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations that constitute the basis for the establishment of the Natural Preserve. Motor vehicle use is prohibited in Natural Preserves (see DOM Section 0304.5.2).

0304.2.6 State Wilderness

State Wildernesses [PRC § 5019.68], in contrast with those areas where human works dominate the landscape, are recognized as areas where the earth and its community of life are untrammled by humans and where humans are visitors who do not remain.

State Wildernesses are further defined as areas of relatively undeveloped land which have retained their primeval character and influence or have been substantially restored to a near-natural appearance without permanent improvements other than semi-improved campgrounds or structures, except for those existing at the time of classification and determined by the California State Park and Recreation Commission to be maintained and used.

State Wildernesses shall be protected and managed so as to preserve their natural conditions. There shall be no commercial enterprise and no permanent road within any wilderness area. Management measures may be taken as necessary for the control of fire, insects, and diseases.

0304.2.7 State Seashore

State Seashores [PRC § 5019.62] consist of relatively spacious coastline areas with frontage on the ocean, or on bays open to the ocean, including water areas seasonally connected to the ocean, possessing outstanding scenic or natural character and significant recreational, historical, archaeological, or geological values.

The purpose of State Seashores shall be to preserve outstanding natural, scenic, cultural, ecological, and recreational values of the California coastline as an ecological region and to make possible the enjoyment of coastline and related recreational activities which are consistent with the preservation of the principal values and which contribute to the public enjoyment, appreciation, and understanding of those values.

Improvements undertaken within State Seashores shall be for the purpose of making the areas available for public enjoyment, recreation, and education in a manner consistent with the perpetuation of their natural, scenic, cultural, ecological, and recreational value. Improvements which do not directly enhance the public enjoyment of the natural, scenic,

cultural, ecological, or recreational values of the seashore, or which are attractions in themselves (see DOM Section 0317.1.2), shall not be undertaken.

0304.2.8 State Marine Conservation Area

State Marine Conservation Areas [PRC § 5019.80 (a) (3)] are non-terrestrial marine or estuarine areas managed to: (1) protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas; (2) protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems; (3) protect or restore diverse marine gene pools; (4) contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems; (5) preserve outstanding or unique geological features; and/or (6) provide for sustainable living marine resource harvest.

Research, education, and recreational activities, and certain commercial and recreational harvest of marine resources may be permitted in State Marine Conservation Areas if the managing and responsible regulatory agencies determine that such use would not compromise protection of the species of interest, natural community, habitat, or geological features. Unless otherwise allowed, it is unlawful to injure, damage, fish, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes.

0304.2.9 State Recreation Area

State Recreation Areas [PRC § 5019.56 (a)] consist of areas selected, developed, and operated to provide outdoor recreational opportunities.

Improvements and uses in State Recreation Areas shall be for the purpose of providing recreational opportunities compatible with scenic and environmental characteristics. Improvements to provide for urban or indoor, formalized recreational activities shall not be undertaken within State Recreation Areas. Motor vehicle use in State Recreation Areas is confined to specifically designed and maintained roads and trails (see DOM Section 0304.5.2).

0304.2.10 State Beach

State Beaches [PRC § 5019.56 (c)] consist of areas with frontage on the ocean or bays and managed to provide swimming, boating, fishing, and other beach-oriented recreational activities. Motor vehicle use on State Beaches is confined to paved areas and other areas specifically designed and maintained for normal public ingress, egress and parking (see DOM Section 0304.5.2).

0304.2.11 State Vehicular Recreation Area

State Vehicular Recreation Areas [PRC § 5090.43 (a)] are established on lands where there are quality recreational opportunities for off-highway motor vehicles. These areas are developed, managed, and operated for the purpose of making the fullest public use of the outdoor recreational opportunities present. The natural and cultural elements of the environment in State Vehicular Recreation Areas may be managed or modified to enhance the visitor's recreational experience while protecting, maintaining and restoring soils and wildlife habitats.

0304.2.12 State Marine Recreational Management Area

State Marine Recreational Management Areas [PRC § 5019.80 (a) (5)] are non-terrestrial marine or estuarine areas managed to provide, limit, or restrict recreational opportunities to meet other than exclusively local needs, while preserving basic resource values for present and future generations.

In State Marine Recreational Management Areas, it is unlawful to perform any activity that, as determined by the designating entity or managing agency, would compromise the recreational values for which the area may be designated. Recreational opportunities may be

protected, enhanced, or restricted, while preserving basic resource values of the area. No other use is restricted.

0304.2.13 State Historic Park and State Historical Monument

State Historic Parks and State Historical Monuments [PRC § 5019.59] consist of areas established primarily to preserve objects of historical, archaeological, and scientific interest, and archaeological sites and places commemorating important persons or historic events.

Areas outside the primary historic zone may be designated as recreation zones to provide limited recreational opportunities that will supplement the public's enjoyment of the unit. Certain agricultural, mercantile, or other commercial activities may be permitted if those activities are a part of the history of the individual unit and any developments retain or restore historical authenticity. Motor vehicle use in State Historic Parks and State Historical Monuments is confined to paved areas and other areas specifically designed and maintained for normal ingress, egress and parking (see DOM Section 0304.5.2).

0304.2.14 State Cultural Reserve

State Cultural Reserves [PRC § 5019.65 (b)] consist of areas selected and managed for the purpose of preserving and protecting the integrity of places that contain historic or prehistoric structures, villages, or settlements, archaeological features, ruins, artifacts, inscriptions made by humans, burial grounds, landscapes, hunting or gathering sites, or similar evidence of past human lives or cultures. These areas may also be places of spiritual significance to California Native Americans.

Within State Cultural Reserves, the highest level of resource protection shall be sought. Living and nonliving resources contained within State Cultural Reserves may be used for ceremonial or spiritual purposes, consistent with other laws, and if the use is not harmful to threatened or endangered species or to the cultural resources intended for protection by this designation. Management actions shall be consistent with the preservation of cultural resources and with federal and state laws.

Improvements may be undertaken for the purpose of providing public access, enjoyment, and education, and for cultural resource protection. Improvements made for the purpose of cultural resource protection shall take into account the possible need for access to the site for ceremonial or spiritual purposes. Motor vehicle use in State Cultural Reserves is confined to paved areas and other areas specifically designed and maintained for normal ingress, egress and parking (see DOM Section 0304.5.2).

0304.2.15 Cultural Preserve

Cultural Preserves [PRC § 5019.74] consist of distinct areas of outstanding cultural interest established within the boundaries of other State Park System units for the purpose of protecting such features as sites, buildings, or zones which represent significant places or events in the flow of human experience in California.

Within Cultural Preserves, complete integrity of the cultural resources shall be sought, and no structures or improvements which conflict with such integrity shall be permitted. Motor vehicle use is prohibited in Cultural Preserves (see DOM Section 0304.5.2).

0304.3 Knowledge-Based Management Approach

Natural resource management decisions will be based upon the best available information obtained from systematic inventory/monitoring data, scientific studies and the experience of the Department's resource professionals and advisors. The Department will conduct resource programs that provide an ever-increasing amount of high-quality information that is readily available for park managers.

0304.4 Active Management

Natural resource management is predicated on the understanding that the Department must monitor conditions and take appropriate action to maintain these values. This is accomplished through the combined effort of restoring damaged or altered natural resources and a systematically applied program of regular inspection and maintenance. Efforts may include, for example:

- Removal of exotic species;
- Removal of contaminants and non-historic structures or facilities;
- Restoration of natural processes such as fire, erosion, and sedimentation;
- Restoration of native plant and animal communities;
- Restoration of lands disturbed by previous extractive uses such as mining, logging or livestock grazing, abandoned or unauthorized roads, or disrupted natural waterways and/or shoreline processes; or
- Restoration of areas disturbed by and no longer used for administrative, management or development activities or by public use.

0304.5 Miscellaneous Public Resources Code Sections Related to Natural Resource Protection and Management**0304.5.1 Removal and Disposal of Debris**

The Department may remove and dispose of all floating logs, timber, lumber and other debris deposited on public beaches, waterways or other lands within the State Park System when such deposits create a hazard or impediment to public safety, enjoyment, and use of the unit. See DOM Section 0310.8 for additional information on the disposition of woody debris. PRC § 5007.5.

0304.5.2 Public Use of Motor Vehicles

The use of motor vehicles by members of the public in units of the State Park System is subject to the following limitations:

- a. In State Natural Preserves and State Cultural Preserves, motor vehicle use is prohibited. PRC § 5001.8 (a)
- b. In State Parks, State Reserves, State Beaches, and historical units, motor vehicle use is confined to paved areas and other areas specifically designed and maintained for normal ingress, egress and parking. PRC § 5001.8 (a)
- c. In State Recreation Areas, motor vehicle use is confined to specifically designated and maintained roads and trails. PRC § 5001.8 (a)
- d. In State Vehicular Recreation Areas, motor vehicle use is confined to areas and routes designated for that purpose. PRC § 5001.8 (b)

0304.5.3 Public Use of Mechanized Equipment in State Wilderness

In State Wildernesses, the use of motorized equipment, motor vehicles or vessels, or other forms of mechanized transport by members of the public is prohibited. PRC § 5001.8 (a) See DOM 0304.5.4 for exceptions for management use of mechanized equipment in State Wilderness.

0304.5.4 Management Use of Mechanized Equipment in State Wilderness

Based on wilderness statutes and their intent, and statutes mandating that the Department restore and maintain resources, the use of motorized equipment, motor vehicles or vessels, or other forms of mechanized transport in designated wilderness areas may be considered only when necessary for emergencies involving the health and safety of persons or when the primary management purpose is for necessary natural or cultural resource protection and restoration. In balancing the need to protect solitude and primitive recreation, the following

conditions apply to the Department's use of mechanized equipment, including vehicles, in wilderness areas:

- a. Reasonable alternatives to mechanized equipment do not exist;
- b. A significant resource management need exists, and the result of the work will be substantially unnoticed;
- c. The use of the mechanized equipment is non-recurring, and shall be minimized; and
- d. The District Superintendent shall provide prior written approval, assuring the above requirements will be met.

0305 AIR RESOURCES

Air quality is an important factor in maintaining park natural resource values and visitor experiences. Vegetation, visibility, water quality, wildlife, cultural resources, and many other elements of a park environment are all sensitive to air pollution to some degree. In most circumstances, however, air pollution is a regional problem to which Departmental operations and visitor use do not significantly contribute.

The Department will strive to perpetuate the best possible air quality in parks to (1) preserve natural resources and systems; (2) preserve cultural resources; and (3) sustain visitor enjoyment, human health, and scenic vistas. The Department will assess park operations and uses that may contribute to local air pollution, such as campfires, and take appropriate corrective actions.

The Department will promote and pursue measures to protect air resource values from the adverse impacts of air pollution.

0306 WATER RESOURCES

The presence of water, whether standing in lakes, ponds, or reservoirs, flowing in streams, breaking in waves or surf, or falling in cataracts, is one of the major attributes of park system environments. Water in one form or another constitutes the major reason for establishing many units of the State Park System. Like other environmental features, water can be of primary value for natural, cultural or aesthetic reasons or for its use in recreational activities, or it can serve a combination of these purposes.

Because of their inherent characteristics, water features are particularly vulnerable to conflicting pressures for preservation and natural systems management, and use. Appropriate use of park water resources is determined through the Department's planning process, which considers visitor uses together with natural system function.

0306.1 Water Resources Planning and Management Policy

It is the policy of the Department to make an early determination of a park unit's water resources values and to avoid establishment of improper use patterns that may be damaging to the quality, quantity, or biological integrity of water features, or their interrelationship with other park system values. The controlling factors in these determinations will be expressed in the classification of the unit and in the General Plan.

0306.2 Watershed Management Policy

Hydrologic processes include runoff, erosion, and disturbance to vegetation and soil caused by meteorologic events, mass wasting, and landslide movements. These processes originate and can be addressed within watersheds.

It is the policy of the Department to adopt a comprehensive, integrative, and cooperative watershed approach to managing watersheds as complete hydrologic systems, and to minimize human disturbance to the natural upland processes that deliver water, sediment, nutrients, and natural debris to streams.

0306.3 Stream Management Policy

Stream processes beneficial to the proper health and functioning of watersheds include flooding, stream migration (meandering), and associated erosion and deposition.

It is the policy of the Department to manage streams to protect stream processes that create natural habitat features such as floodplains, riparian communities, natural woody debris accumulations, terraces, gravel bars, riffles, and pools.

0306.4 Watershed and Stream Protection Policy

It is the policy of the Department to achieve the protection of watershed and stream features primarily by avoiding adverse impacts to streambank and bed morphology, to floodplain features, and to watershed and riparian vegetation, by correcting upland hydrologic disruptions and by allowing natural fluvial processes to proceed unimpeded.

When conflicts between infrastructure (such as bridges and pipeline crossings) and stream processes are unavoidable, it is the policy of the Department to first consider relocating or redesigning facilities, rather than modifying fluvial processes and manipulating streams. Where stream manipulation is unavoidable, the policy is to use techniques that are visually non-obtrusive and that protect natural processes to the greatest extent practicable.

0306.5 Stream Restoration Policy

Stream restoration efforts will emphasize the conditions of dynamic equilibrium, whereby the stream system will be self-maintaining under a variety of natural conditions and flows, once properly designed and configured.

When stream restoration becomes necessary, it is the policy of the Department to first consider and use natural channel design methodology in lieu of traditional engineering practices that focus on symptoms rather than underlying causes. Such natural methodology will use native materials and take into account natural channel patterns, profiles and dimensions to the greatest extent practicable.

0306.6 Floodplain Management Policy

Naturally functioning floodplains support and maintain desirable ecosystems and processes, such as water retention, recharge, and habitat.

The policy of the Department is to manage for the preservation of floodplain values and minimize potentially hazardous conditions associated with flooding by:

- a. Protecting, restoring, and maintaining the natural resources and functions of floodplains;
- b. Avoiding the long- and short-term environmental effects associated with the occupancy and modification of floodplains; and
- c. Avoiding direct and indirect development and actions in floodplains that could adversely affect the natural resources and functions of floodplains or increase flood risks.

When it is not practicable to locate or relocate development or inappropriate human activities to a site outside and not affecting the floodplain, the policy is to use non-structural measures, such as temporary closures during periods of potential flooding, as much as practicable to reduce hazards to human life and property, while minimizing the impact to the natural resources and functions of floodplains.

0306.7 Wetlands Management Policy

Wetlands are an integral part of the rich ecological diversity of California. They support a wide variety of fish and wildlife habitat and many essential ecological functions, including flooding and groundwater recharge. Wetlands also provide outdoor recreation, including wildlife observation.

It is the policy of the Department to prevent the destruction, loss, or degradation of wetlands by:

- a. Identifying wetland resources and determining appropriate uses;
- b. Preserving and enhancing the natural and beneficial values of wetlands;
- c. Avoiding direct and indirect construction and actions in wetlands unless the benefits of the facility or activity clearly outweigh the potential adverse impacts, there are no practicable alternatives, and the proposed action includes all practicable measures to minimize harm to wetlands;
- d. Adhering to and implementing the State's Wetlands Conservation Policy of no net loss of wetlands and a longer-term goal of a net gain of wetlands across the park system through restoration of previously degraded or destroyed wetlands;
- e. Adhering to and implementing the Keene-Nejedly California Wetlands Preservation Act (PRC § 5810-5818); and
- f. Avoiding and discouraging offsite mitigation as a means of increasing wetlands when such mitigation would propose the creation of wetlands features in uplands that were not historically and naturally wetlands.

When natural wetland characteristics or functions have been degraded or lost due to previous or on-going human actions, the Department will, to the extent appropriate and practicable, restore them to pre-disturbance conditions.

For the purposes of this policy, wetlands are broadly defined as lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, including springs and seeps, wet meadows, marshes, vernal pools, tidal flats, and portions of streams, ponds, and lakes. This policy recognizes that there are many valid definitions of wetlands at various levels of government, and it is not meant to replace or usurp any of them.

0306.8 Coastal Lagoon Processes and Management

Lagoons (salt or freshwater enclosures) are found in many coastal State Park System units. Lagoons typically provide important habitat for shorebirds, amphibians, and fishes, often providing habitat for rearing of juvenile fish. While the hydrologic and geomorphic processes under which lagoons form and persist in different parts of the state show some variation, most lagoons are formed at river mouths when surface waters are separated (closed off) from the ocean by sandbar deposition. Most of the river mouth lagoons normally breach one or more times during the year, allowing lagoon waters to exchange with ocean water. Breaching usually occurs under conditions of high stream flow, extreme tides, or heavy surf.

Stream flows may be insufficient to initiate natural lagoon breaching. Low flow is often a result of human alterations to the stream hydrology such as impoundments and water withdrawal. When a connection to the ocean is not re-established, water in lagoons may reach high levels and pose a threat to adjacent private property, park facilities, or park features and may cause changes in ecological function.

0306.8.1 Coastal Lagoon and Breaching Policy

In general, it is the policy of the Department to allow the natural process of lagoon formation and breaching to occur without interference. Where human activities or structures have altered the natural process of lagoon formation and breaching, and where these conditions pose a threat to public health and safety, property values, or natural resource values the Department may, in consultation with appropriate local, state, and federal agencies, investigate alternatives for mitigating the effects of such activities or structures and for restoring natural conditions, up to and including artificial breaching of lagoons. The natural values of the lagoon will be considered in evaluating these alternatives.

0306.9 Water Quality and Quantity

Natural water quality and quantity are important for landscape formation, for fish and wildlife resources and ecological functions, for human health and safety, and for recreational values.

Two of the most common damaging influences in connection with water and its park system values are diversion and pollution. Diversion applies particularly to fresh water streams, and pollution to any water body. The pollution of surface water and groundwater by both point and non-point sources can impair the natural functioning of aquatic and terrestrial ecosystems, and diminish the utility of park waters for visitor use and enjoyment. The quantity and natural flow of surface water and groundwater, if limited or degraded, can have significant adverse impacts on aquatic and terrestrial ecosystems, in particular aquatic animal life, and vegetation communities and habitats.

0306.9.1 Water Quality and Quantity Policy

It is the policy of the Department to protect both surface water and groundwater quality and quantity by:

- a. Maintaining sufficient knowledge of park water resources values so as to be aware of potential impact, degradation, or other change from natural conditions;
- b. Working collaboratively with others to achieve Department water management goals;
- c. Avoiding or eliminating unnatural degradation of waters in the State Park System, and complying with laws pertaining to clean water and other water quality parameter regulations;
- d. Allowing no diversion of water from a park system stream, spring, or lake or the alteration of a natural stream regime without a thorough evaluation of the known or possible effects of such diversion on park system values and water rights review; and
- e. Taking appropriate actions to maintain, conserve, and restore the natural quality and quantity of surface water and groundwater.

0306.10 Water Rights

Ensuring and protecting water rights for springs, streams and other surface waters is essential to the Department's natural resource management mission. For many units of the State Park System, water rights have been allocated without consideration of the legitimate needs of the resources dependent upon them or the Department's present and future desired use of them.

0306.10.1 Water Rights Policy

It is the policy of the Department to protect State Park System water resources by actively securing and protecting its water rights. The Department will review and challenge applications for water rights that may affect park resources.

0307 GEOLOGIC RESOURCES

Geologic resources are fundamental to the values and diversity of the State Park System's natural components. Rock outcrops, mountaintops, canyons, and desert landscapes reveal geologic influences and represent dynamic processes and enduring landmarks. In addition to robust landscapes, some geologic features are vulnerable and fragile such as tufa, glittering crystals, ephemeral dune forms, mineral crusts, and arches.

Geologic characteristics are responsible for soil formation, landscape shape, and erodibility. Geology influences plant growth, animal habitat, and even animal distribution and migration patterns. Geologic issues are often key to resource planning and management on a watershed scale. Eroded sediments provide habitat for aquatic life and accumulate behind dams, mass wasting and erosion can degrade water quality, and past extractive activities such as logging and mining can change the shape of the land and how geologic processes function. Because of the integral nature of geologic resources and the far-reaching impacts of geologic factors, an understanding of them enhances understanding and management of biological and other natural resources.

The Department protects and manages geologic features and resources to ensure that these resources will endure in perpetuity as integral components of park natural systems.

0307.1 General Geologic Policy

It is the policy of the Department to:

- a. Maintain and restore the integrity of existing geologic resources;
- b. Integrate geologic resource management in Department operations and planning;
- c. Assess the impacts of natural processes and human-related events on geologic resources;
- d. Interpret geologic resources for park visitors where appropriate and consistent with interpretive plans;
- e. Remove non-historic defacements of geologic features to the extent feasible and restore the damaged sites to as natural an appearance and condition as is possible;
- f. Protect geologic features from adverse effects of human activity, while allowing natural processes to continue;
- g. Support efforts to inventory, monitor, and identify significant geologic features, formations, and resources;
- h. Limit human-caused impacts to significant geologic features through the use of non-intrusive visitor barricades, educational materials, and careful placement of visitor access facilities (trails, boardwalks, etc.); and
- i. Intervene in natural geologic processes only when:
 1. Necessary in emergencies that threaten human life and property;
 2. There is no other feasible way to protect natural resources, park facilities, or historic properties; or
 3. Intervention is necessary to restore impacted conditions and processes, such as restoring landscapes or habitat for threatened or endangered species.

0307.2 Geologic Monitoring

The Department recognizes the value of monitoring physical as well as biological components of ecosystems, in order to support understanding and effective resource management. Geologic monitoring can be used to understand ecosystems and the role of natural and human influences in producing change on a human scale (i.e. over 100 years). Checklists can be adapted for each park's geologic setting and should be developed and filled out by geologic specialists familiar with the park unit to establish monitoring needs and trends. For further information on geologic monitoring, see the Natural Resources Handbook.

0307.3 Geologic Hazards

Geologic hazards may include earthquakes, liquefaction, volcanic eruptions, mudflows, landslides, floods, subsidence, shoreline processes, tsunamis, and avalanches. The Department should work closely with specialists at the California Geological Survey (CGS), and with local, state, and federal disaster management officials to devise effective geologic hazard identification and management strategies. Although the magnitude and timing of future geologic hazards are difficult to forecast, park managers need to understand future hazards and, once the hazards are understood, minimize their potential impact on visitors, staff, and developed areas.

0307.3.1 Siting Facilities in Geologically Hazardous Areas

Geologic hazard areas include sites with landslides, unstable soils, fault zones, thermal areas, floodplains, flash-flood zones, and coastal areas. Avoidance of geologic hazards will result in safer and more cost-effective developments. Regulatory hazard zones are areas delineated by the CGS that address potential ground deformation caused by earthquakes (surface faulting, landslides, and liquefaction). Maps showing regulatory hazard zones are available from the CGS.

0307.3.1.1 Siting Facilities to Avoid Natural Hazards Policy

The Department will strive to site facilities where they will not be damaged or destroyed by natural physical processes and where they will not alter natural processes.

Park development that is damaged or destroyed by a destructive, hazardous, or catastrophic natural event will be thoroughly evaluated for relocation or replacement by new construction at a different location. If a decision is made to relocate or replace a severely damaged or destroyed facility, it will be placed, if practicable, in an area that is believed to be free from natural hazards.

In areas where dynamic natural processes cannot be avoided, developed facilities should be sustainably designed (e.g., movable in advance of hazardous storms or other conditions). When it has been determined that facilities must be located in geologically hazardous areas, their design and siting will be based on:

- a. A thorough understanding of the nature of the physical processes; and
- b. Avoiding or mitigating risks to human life and property and the effects of the facility on natural physical processes and the ecosystem.

When existing facilities are already located in hazardous areas, the Department will examine the feasibility of phasing out, relocating, or providing alternative facilities for the park developments, consistent with other sections of these management policies.

0307.3.1.2 Siting Structures in Seismic Hazard Zones

State law prohibits construction of certain structures for human occupancy across traces of active faults (PRC § 2621 et seq.) and requires geologic investigations in areas delineated as zones of required investigation for liquefaction and earthquake-induced landslides (PRC § 2690 et seq.). Facilities planned for construction in seismically active areas (not straddling active fault traces) will be designed to accommodate seismic shaking and associated ground deformation.

0307.3.2 Coastlines and Coastal Erosion

Much of the State Park System is comprised of lands along the coast. These lands are subject to dynamic forces from the sea including waves, storms, seasonal beach changes, bluff erosion, and seacliff retreat. Coastal erosion is episodic, site-specific, and directly related to meteorological changes, as well as structural and geological characteristics. Ocean wave erosion and seacliff retreat are responsible for creating magnificent scenic landscapes by carving out graceful coves, rocky headlands, and steep ocean cliffs. Even the popular sandy beaches are the result of erosive factors. The dynamic processes of ocean wave erosion and seacliff retreat are problems only when facilities are in jeopardy, or when public safety is threatened.

0307.3.2.1 Coastal Development Siting Policy

It is the policy of the Department that natural coastal processes (such as wave erosion, beach deposition, dune formation, lagoon formation, and seacliff retreat) should be allowed to continue without interference. The Department shall not construct permanent new structures and coastal facilities in areas subject to ocean wave erosion, seacliff retreat, and unstable cliffs. New structures and facilities located in areas known to be subject to ocean wave erosion, seacliff retreat, or unstable bluffs shall be expendable or movable. Structural protection and re-protection of existing developments is appropriate only when:

- a. The cost of protection over time is commensurate with the value of the development to be protected, and
- b. It can be shown that the protection will not negatively affect the beach or the near-shore environment.

Where existing developments must be protected in the short run to achieve park management objectives, including high-density visitor use, the Department should use the most natural-appearing method feasible, while minimizing impacts outside the threatened area.

Any shoreline manipulation measures proposed to protect cultural resources may be approved only after an analysis of the significance of the cultural resource and the degree to which proposed measures would impact natural resources and processes, so that an informed decision can be made through an assessment of alternatives and long term costs.

0307.4 Caves

As used here, the term “caves” includes limestone and gypsum caves, sand caves, lava tubes, sea caves, and talus caves. The Department will manage caves in accordance with District Superintendent-approved cave management plans to perpetuate the natural systems associated with caves, such as drainage patterns, air flow, mineral deposition, and plant and animal communities.

0307.4.1 Cave Management Policy

No developments or uses, including those that allow for general public entry such as pathways, lighting, and elevator shafts, will be allowed in, above, or adjacent to caves until it can be demonstrated that they will not significantly impact natural cave conditions, including sub-surface water movements. Developments already in place above caves will be removed if they are impairing or threatening to impair natural conditions or resources.

The Department will strive to close caves or portions of caves to public use, or to control such use, when such actions are required for the protection of cave resources or for human safety. Some caves or portions of caves may be managed exclusively for research, with access limited to permitted research personnel. Recreational use of undeveloped caves may be governed by a permit system. Significant caves will be identified. Specific locations of significant cave entrances may be kept confidential.

0307.5 Geothermal and Hydrothermal Resources

Geothermal and hydrothermal systems are comprised of a subsurface heat source, heated conduit rock formations, and air and/or water that circulates through the formations. The heated water may discharge at the surface, creating features such as geysers, hot springs, mudpots, fumaroles, unique/rare mineral precipitates and formations, and supporting hydrophilic (water-loving) biotic communities.

0307.5.1 Geothermal and Hydrothermal Resources Policy

Hydrothermal (hot water) resources within units of the State Park System will be protected, preserved, and managed as significant components of units' natural resources systems, for public education, and enjoyment, interpretation, and scientific research.

In some situations, potential recreational development of hydrothermal resources within units of the State Park System may be identified through a comprehensive planning process.

0308 SOIL RESOURCE MANAGEMENT

Soils form the basis for ecosystems—transitional between the non-living physical rock and sediments below and plant and animal life above and below the ground surface. Living systems occurring above and below ground surface are determined by the properties of the soil, which in turn are determined by the properties of the underlying rock, climate, living organisms, topography and time.

Soil performs vital functions in ecosystems such as sustaining plant and animal life; regulating and partitioning water and solute flow; filtering, immobilizing, detoxifying, buffering, storing, and cycling nutrients; and providing physical support.

0308.1 Soil Protection Policy

The Department will preserve the soil resources of the State Park System, and prevent, to the extent possible, unnatural erosion, physical removal, or contamination of soil, or its contamination of other resources. In order to accomplish this, the Department will:

- a. Conserve the soils of the State Park System, and prevent destructive or unnatural erosion by means that are in harmony with the purposes of each unit;
- b. Obtain inventories of soils adequate for the management of park system resources;
- c. Work with local, state, and federal agencies charged with soil conservation responsibilities to guide resource management and development decisions;
- d. Prevent, or if that is not possible, minimize adverse, potentially irreversible impacts on soils. Soil conservation and soil amendment practices may be implemented to reduce impacts;
- e. Minimize human-induced erosion by reducing concentrated runoff from use areas, reducing elevated groundwater levels from irrigation and park developments, and limiting surface disturbance of fragile soils;
- f. Minimize soil excavation, erosion, and off-site soil migration during and after development of park facilities; and
- g. Follow written prescriptions to ensure soil importation and soil amendment use do not negatively alter the physical, chemical, or biological characteristics of the native soil.

0309 PALEONTOLOGICAL RESOURCES

Paleontological resources including both organic and mineralized remains in body or trace form, are the records in stone of plant and/or animal species from past geological ages. Paleontological resources, by reason of their occurrence in rocks or soils, are frequently difficult to recognize, except by persons with specific knowledge and training in paleontology. They represent the only source or knowledge concerning life on earth in the geological past. They are irreplaceable, and if destroyed or damaged, are lost forever.

Paleontological resources in the State Park System require protection from damaging influences, including deterioration or adverse modification of their environment.

0309.1 Site Development Policy

Sites proposed for development will be evaluated for paleontological resources in the preliminary planning stage. Stabilization of paleontological resources may be required to prevent loss, but will be done in ways that protect the integrity of the sites.

0309.2 Paleontological Resource Protection Policy

Paleontological resources will be protected, preserved, and managed for public education, interpretation, and scientific research. In order to accomplish this the Department will:

- a. Inventory paleontological resources and systematically monitor for newly exposed fossils, especially in areas of rapid erosion. Scientifically significant fossils will be protected according to procedures established for the park unit. These procedures may include site stabilization, physical protection, collection, or documentation according to the site-specific conditions;
- b. Encourage academic field research and scientific study in accordance with an approved Application and Permit to Conduct Paleontological Investigations/Collections (DPR 412P);
- c. Interpret paleontological resources for park visitors where appropriate and consistent with interpretive plans;
- d. Prohibit general classroom collection activities; and
- e. Protect known fossil localities and prevent damage to and unauthorized collection of fossils. To protect paleontological resources from harm, theft, or destruction, the Department may keep the locality of significant fossils confidential.

0310 PLANT RESOURCES

Plants, and the vegetation they comprise, are conspicuous and dynamic elements of the natural landscape. This is generally true regardless of the dominant vegetation. Accordingly, vegetation is often the focus of environmental management programs in units of the State Park System. Such programs benefit from integrated planning that takes into account the resources, classification, and declared purpose of the unit, and from science-based evaluation of their success through monitoring.

0310.1 Plant Management Goals

The general goal of plant management in the State Park System is to protect, restore, and maintain native plant populations and naturally occurring plant communities. When feasible, this will be accomplished through maintenance or re-establishment of natural processes such as fire, flooding, and succession.

Plant management of natural areas usually differs from that of developed portions of units, although some vegetation management principles are common to both situations and to all classifications of units. For example, landscaping with invasive exotic plants is not appropriate in either natural or developed portions of units of the State Park System. Some management goals may be specific to the purpose of establishment and the resource management objectives of an individual park unit.

0310.1.1 Plant Management Policy

It is the policy of the Department to acquire, preserve, and interpret outstanding examples of native California species; and to acquire, perpetuate, and interpret natural plant communities, associations, natural processes (e.g. succession), and examples of rare, endangered, endemic, or otherwise sensitive native California plants. This will be done in concert with other agencies and organizations.

To maintain native plants as part of the natural ecosystems, the Department will:

- a. Preserve and restore the natural abundance, diversity, dynamics, distributions, stand structure and species composition, and the communities and ecosystems in which they occur;
- b. Protect state and federally-listed threatened, endangered, rare, or otherwise sensitive species;
- c. Restore native plant populations in parks where they have been extirpated by past human-caused actions;
- d. Minimize negative human impacts on native plants, populations, communities, ecosystems, and the processes that sustain them while providing opportunities for the public to experience plants native to California; and
- e. Protect human health and safety (e.g. hazard tree removal).

0310.2 Natural Succession

Cumulative changes in plant communities occupying a given area in response to natural processes and extraneous forces are called succession.

0310.2.1 Natural Succession Policy

It is the policy of the Department to manage to restore and perpetuate natural succession by:

- a. Re-introducing natural processes when they have been altered by human intervention such as fire suppression;
- b. Restoring seral stages of plant communities in areas that can no longer support a natural process;
- c. Restoring mosaics of successional stages.

Exceptions to the policy may occur when a unit is managed to favor a particular seral stage as a condition of unit establishment. For example, an early successional stage is specified in the Declaration of Purpose for Azalea SR, whereas redwood parks are generally managed to promote late successional stages.

0310.3 Vegetation Management in Developed Areas

When a wildland is developed, the long-term impacts may be significant and can include:

- Removal of vegetation or injury to vegetation;
- Creation of impervious surfaces;
- Re-contouring of land;
- Increase of overland water flow and erosion;
- De-stabilization of existing vegetation, with possible loss of diversity and community composition;
- Alteration or loss of wildlife habitat and migration corridors;
- Introduction or promotion of exotic plants;
- Alteration of the aesthetics of the vegetation resource.

Intense visitor use within a developed area may cause soil compaction and/or damage to both young and mature plants, and may encourage opportunistic animal populations to overpopulate and become pests.

Because the impacts to ecosystems are cumulative, proactive vegetation management is essential to maintain the aesthetic characteristics and to correct imbalances in animal and plant pest populations.

0310.3.1 Vegetation Management Planning for Developed Areas

The Department will plan long-term vegetation management for developed areas that is consistent with the classification and purposes established for the unit (see Natural Resources Handbook for sample vegetation management plans). Vegetation management objectives in developed areas may include:

- Acquainting visitors with native vegetation and ecological processes vital to the area;
- Maintaining a plant community that is resistant to disturbance;
- Maintaining a recreational surface, such as turf, when specified in the unit's General Plan;
- Maintaining a plant community that enhances visitor and staff safety;
- Protecting cultural and natural resources around the developed area; and
- Enhancing aesthetics for visitors.

In altered plant communities managed for a specified purpose, plantings will consist of species that are native to the park or that are historically appropriate for the period or event commemorated, or that can be cultivated or otherwise prevented from invading into areas managed for their natural values.

Use of exotic plants must conform to the Exotic Plant Landscaping Policy, DOM Section 0310.7.1. Use of exotic plantings in altered communities may be appropriate under any of the following conditions:

- Where needed to protect against the undesirable impacts of adjacent land uses, in localized, specific areas, screen plantings may be used, provided that the plantings do not result in the invasion of exotic species;
- Where necessary to preserve and protect the desired condition of specific cultural resources and landscapes. Plants and plant communities generally will be managed to reflect the character of the landscape that prevailed during the historic period. Efforts may be made to extend the lives of specimen trees dating from the historic period being commemorated. An individual tree or shrub known to be of historic value that is diseased

beyond recovery and has become hazardous will be removed and may be replaced. While specimen trees or shrubs that need to be perpetuated are still healthy, but are not reproducing, their own progeny will be propagated from seeds or through vegetative reproduction, such as cuttings;

- Where cultivated crop plants may be needed for livestock or agricultural uses that are allowed as part of the cultural landscape, authorized by law, or retained as a property right; or
- Where needed for intensive development areas. Such plantings will use native or historic species and materials to the maximum extent possible. Certain native species may be fostered for aesthetic, interpretive, or educational purposes.

Exotic species may not be used to vegetate vista clearings in otherwise natural vegetation.

Limited, recurring use of soil fertilizers or other soil amendments may be allowed only as needed to maintain the desired condition of the altered plant community, and only where such use does not unacceptably alter the physical, chemical, or biological characteristics of the soil and biological community, and does not degrade surface or ground waters. See Natural Resources Handbook for further detail.

0310.4 Revegetation

Landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, high winds, and fires, will be allowed to recover naturally unless manipulation is necessary to mitigate for excessive disturbance caused by past human effects, or to protect park developments or the safety of people using those developments. Landscape and vegetation conditions altered by human activity may be manipulated where the park management plan provides for restoring the lands to a natural condition. Management activities to restore human-altered landscapes may include, but are not restricted to:

- Removing constructed features that are not culturally significant, restoring natural topographic gradients, and revegetating with native plant species on acquired inholdings and on sites from which previous development has been removed;
- Restoring natural processes and conditions to areas disturbed by human activities such as fire suppression;
- Rehabilitating areas disturbed by visitor use or by the removal of hazard trees;
- Mitigating for park projects such as facility development; and
- Maintaining open areas and meadows in situations in which they were formerly maintained by natural processes that now are altered by human activities.

Revegetation efforts will use seeds, cuttings, or transplants representing species and gene pools indigenous to the ecological portion of the park in which the restoration project is occurring. See also DOM Section 0310.5.3.1.

Landscape restoration efforts will use geological materials and soils obtained in accordance with geological and soil resource management policies (DOM Sections 0307 and 0308) and with pest exclusion policies (DOM Chapter 0700, Pest Control). Landscape restoration efforts may use, on a temporary basis, appropriate soil amendments, including proper mycorrhizal inoculants, so long as that use does not unacceptably alter the physical, chemical, or biological characteristics of the soil and biological community, and does not degrade surface or ground waters.

A Revegetation Plan should precede revegetation efforts. See Natural Resources Handbook for further detail.

0310.4.1 Genetic Integrity Policy

In order to maintain the genetic integrity and diversity of native California plants, revegetation or transplant efforts in the State Park System will employ local populations, unless it is shown by scientific analysis that these populations are not genetically distinct from other populations being proposed for use. If local populations have been decimated, the closest, most

genetically similar population(s) to those being lost from the State Park System unit will be used (California State Park and Recreation Commission Policy II.4).

Sources of materials for revegetation will be, in preferred order:

1. Seeds, plants, and cuttings salvaged from the site prior to disturbance;
2. Materials from similar vegetation and sites within the unit;
3. Materials collected offsite, but from within the same ecological region, elevation, and site characteristics as the site to be revegetated.

If seeds or plants must be acquired from commercial sources, the origin of the materials should be from within the same ecological region, elevation, and site characteristics as the project area.

In order to eliminate the possibility of genetic contamination of any naturally occurring population at or near a revegetation site, threatened or endangered plant taxa will not be used for revegetation unless the revegetation is being done as part of a restoration plan for that taxon (See DOM Section 0310.5.3.1).

0310.5 Plant Species of Concern Including Rare, Threatened and Endangered (RTE) Plants

Plants may be listed as threatened or endangered plants under the California Endangered Species Act (California Fish and Game Code § 2050 et seq.) and as rare under the California Native Plant Protection Act (California Fish and Game Code § 1900-1913). Plants may also be listed as endangered or threatened under the Federal Endangered Species Act.

Plant species of concern also include plant taxa that require consideration under the California Environmental Quality Act (CEQA). CEQA requires that species not included in any listing as rare, threatened, or endangered also be given consideration if it can be shown that the species meet the criteria for listing [California Code of Regulations, Title 14, § 15380, PRC § 21001(c)]. The California Native Plant Society maintains that the plants on their lists 1 and 2 (List 1A, Plants Presumed Extinct in California; List 1B, Plants Rare, Threatened, or Endangered in California and Elsewhere; List 2, Plants Rare, Threatened, of Endangered in California, But More Common Elsewhere) all meet the criteria and are eligible for listing under the California Endangered Species Act. Plants in any of these categories should be fully considered during preparation of environmental documents relating to CEQA. Project planning may also benefit from consideration of plants listed as “sensitive” in County General Plans, considered “sensitive” at the County level or species and individuals that are of special interpretive interest at the park unit level.

0310.5.1 Protection of Rare, Threatened and Endangered Plants and Their Habitats Policy

It is the policy of the Department to protect rare plants and their habitats in fulfillment of its mission to help preserve the State’s extraordinary biological diversity, and in accordance with the California Endangered Species Act and the California Native Plant Protection Act. These taxa and habitats will be protected in the context of the native environmental complexes in which they evolved, when feasible.

0310.5.2 Knowledge of Rare, Threatened, Endangered and Other Sensitive Plant Localities

The Department will strive to maintain a working knowledge of the occurrence of listed and other sensitive plants occurring within park units. Ideally, this information will be incorporated into the Unit Data File in both paper copy and digital form. The location of these plants should be noted on maps and be fully available to appropriate staff. Preferably, locations will be defined through use of a Global Positioning System (GPS) and depicted as layers of the Department’s Geographic Information System (GIS). However this information is stored, it will be used for General Planning efforts, resource management, wildfire and other emergency response planning, and facility siting.

0310.5.3 Park Projects and Plant Species of Concern Policy

Prior to conducting projects such as facility development or exotic plant eradication, the Department will determine whether any plant species of concern are in the proposed project area. If plant species of concern are found, the Department will attempt to modify the project to avoid impacts to populations of these plants. Permits, such as an Incidental Take Permit from the California Department of Fish and Game (CDFG) (California Fish and Game Code § 2081), are required if the proposed project cannot be relocated or re-designed to avoid impacts to plants listed as Threatened or Endangered under the California Endangered Species Act. Project proponents will contact the CDFG to obtain necessary permits.

If a project is proposed for an area containing plants listed under the Federal Endangered Species Act and the proposed project is on Federal property, Federal funds are being used, or a Federal permit (such as a Clean Water Act 404 Permit) is required, a Section 7 Consultation with the U.S. Fish and Wildlife Service (USFWS) or an Incidental Take Permit from the USFWS may be required. When there is such a Federal nexus, the USFWS should be consulted for guidance in fulfilling requirements of the Federal Endangered Species Act (see DOM Section 0315.3.1).

See Natural Resources Handbook for the CDFG Guidelines for Assessing Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities - DFG/HCPB. Refer to DOM Chapter 0600, Environmental Review, for guidance regarding compliance with the Environmental Review Process.

0310.5.3.1 Use of Plant Species of Concern Policy

Rare, threatened, or endangered plant taxa, and other plant species of concern, will not be used for revegetation unless the revegetation is being done as part of a restoration plan for that taxon.

0310.5.4 Restoration of Listed Plant Populations

The Department will strive to restore extirpated native plant species to parks whenever all of the following criteria are met:

- Adequate habitat to support the species either exists or can reasonably be restored in the park, and if necessary also on adjacent public lands and waters, and, once a natural population level is achieved, the population can be self-perpetuating;
- The genetic type used in restoration most nearly approximates the extirpated genetic type; and
- The species disappeared, or was substantially diminished, as a direct or indirect result of human induced change to the species population or to the ecosystem, rather than through natural processes.

0310.6 Plant Protection Policy

No person shall willfully or negligently pick, dig up, cut, mutilate, destroy, injure, disturb, move, molest, burn, or carry away any tree or plant or portion thereof, including but not limited to leaf mold, flowers, foliage, berries, fruit, grass, turf, humus, shrubs, cones, and dead wood, except in specific units when authorization by the Department to take berries, or gather mushrooms, or pine cones, or collect driftwood is posted at the headquarters of the unit to which the authorization applies. Any collecting allowed by authority may be done for personal use only and not for commercial purposes. This does not apply to activities undertaken by the Department in conjunction with its resource management activities (CCR, Title 14, § 4306).

Upon finding it will be in the best interest of the Department of Parks and Recreation, the District Superintendent may, by posting, authorize the collecting of driftwood from specified units on a temporary basis (CCR, Title 14, § 4306).

0310.6.1 Tree Protection

Trees are among the most beautiful and highly prized elements of the vegetation of the State Park System. Trees are also among those resources most susceptible to disturbance from human activities, including visitor use, facility development, and maintenance of easements. It may be necessary at times to remove trees from units of the State Park System for purposes such as forest restoration, facility development or hazard fuel reduction. See DOM 0310.8.1 and 0310.8.2 for discussion of the Department's policy on such removals. Refer to the Natural Resources Handbook for technical guidance for avoiding damage to trees in siting, planning, and implementing park developments and activities, and activities of easement holders.

0310.6.1.1 Emergency Tree Felling Policy

It is the policy of the Department that emergency felling of live or dead standing trees or tree parts will occur only for those trees meeting the definition of hazard within the Tree Hazard Program (DOM Section 1104), or the Vegetation Management Guidelines for Trails and Roads in Units of the State Park System, or when standing dead trees constitute an extraordinary fire hazard. The District Superintendent must approve all such activities. Procedural details may be found in the Natural Resources Handbook.

0310.7 Exotic Plant Control

Controlling damaging exotic plant species is one of the Department's greatest challenges in fulfilling its mission to help preserve the natural resource values of the State Park System. Invasive exotic (non-native) plants pose a serious threat to native ecosystems. These species can spread rapidly and out-compete California's native species, simultaneously changing the landscape, destroying habitat for other native species, and upsetting natural ecosystem processes.

Goals of management of invasive exotic plants in the State Park System are to:

- Protect and restore the biological diversity of California State Park ecosystems;
- Reduce the costs of resource maintenance; and
- Reduce fire hazard and fire control costs.

Improved public understanding and support of these management goals may be beneficial in conducting successful invasives control projects.

0310.7.1 Exotic Plant Landscaping Policy

It is the policy of the Department that invasive exotic plants capable of naturalizing in California will not be introduced as landscaping in units of the State Park System. Such species now established will be replaced by natives or non-invading species when feasible. In rare situations, an exotic species may be introduced or maintained to meet specific, identified management needs when all feasible and prudent measures to minimize the risk of escape and naturalization have been taken, and it is:

- a. Used to control another, already-established exotic species; or
- b. Needed to meet the desired condition of a historic resource, but only where it is prevented from being invasive by such means as cultivating or use of sterile cultivars. In such cases, the exotic species used must be known to be historically significant, to have existed in the park during the park's period of historical significance, or to have been commonly used in the local area at that time; or
- c. An agricultural crop used to maintain a cultural resource objective; or
- d. Necessary to provide for intensive visitor use in developed areas, and both of the following conditions exist:
 - Available native species will not meet park management objectives; and
 - The exotic species is managed so it will not spread or become a pest on park or adjacent lands; or

- e. A sterile, non-invasive plant that is used temporarily for erosion control; or
- f. Directed by law or expressed legislative intent.

0310.7.2 Removal of Established Populations of Exotic Plants

Exotic plant species will be managed— up to and including eradication— if (1) control is prudent and feasible, and (2) the exotic species has a deleterious impact on:

- Abiotic processes (such as fire occurrence, frequency, and intensity; erosion and sedimentation; hydrologic regimes; nutrient dynamics; and light availability); or
- Biotic community composition and interactions; or
- Vegetation structure; or
- Genetic integrity; or
- Aesthetic resources; or
- Cultural resources; or
- Public health and safety.

Consideration will be given to managing exotic species that have, or potentially could have, a substantial impact on park resources, and that can reasonably be expected to be successfully controllable. High priority will be accorded those species that cause ecological damage and have the greatest potential to spread rapidly or to increase in cost to control. Lower priority will be given to exotic species that have almost no impact on park resources or that probably cannot be successfully controlled. See also DOM Section 0315.4 regarding Unit Level Planning.

For species determined to be invasive and where management appears to be feasible and effective, the Department should:

- Develop a control strategy based on reasonable funding scenarios including the ability to maintain accomplishments using park maintenance funds (see DOM Section 0313.1.1.1);
- Understand available methodology and appropriateness for park control efforts;
- If appropriate, develop interpretive programs that educate park visitors and the public about the problems caused by exotic plants and the measures used in their control;
- Where appropriate, invite public review and comment.

A number of tools are available for the control of exotic plants. Programs to manage exotic species will be designed to avoid causing significant damage to native species, natural ecological communities, natural ecological processes, cultural resources, and human health and safety. See also DOM Chapter 0700, Pest Control.

Where feasible, the Department will cooperate with adjacent landowners or groups such as Weed Management Areas to control exotic populations more effectively. A control strategy that includes control of seeds or other propagules will be sought.

The immediate removal of new invasions is the most effective method of controlling highly invasive species. District Resource Ecologists will complete, or cause to be completed, annual inspections of each unit to determine whether infestations of any new exotic plants occur in their units.

0310.8 Disposition of Woody Plant Material and Debris

Woody plant material is deposited on land managed by the Department as a result of the purposeful management of its plant communities, by wind and waves, and as a result of wildfire and disease. Relocation or removal of this material by the Department is authorized and governed by PRC §§ 5003, 5007.5, and 5001.65.

0310.8.1 Woody Plant Material and Debris Removal Policy

It is the policy of the Department that live or dead woody material will not be removed from Department lands because of its commercial value (PRC § 5001.65). Downed woody debris

or woody vegetation on Department lands will be removed only for specifically approved reasons of:

- a. Public health and safety;
- b. Mitigation of significant ecosystem damage;
- c. Prevention of the loss or theft of the resource;
- d. Vegetation management;
- e. Wildlife habitat management; or
- f. Cultural resource management.

The District Superintendent (or designee) must approve removal of woody debris that has been naturally deposited on parklands or created by park management activities. Wood will not be removed from the park unit if there is a high risk of transporting exotic pests.

Tree felling or the uncontrolled gathering of scattered wood inside the State Park System by the general public is not allowed, except for driftwood (see DOM Section 0317.1.3.3). The District Superintendent will ensure that the public will only have access to wood that is located in a safe, environmentally stable, and easily accessible area.

It is the policy of the Department that any wood removal be accomplished in such a manner as to cause the least amount of natural and cultural resource damage, the least disturbance to park visitors, and the greatest direct benefit to the Department. Removal of this material from aquatic ecosystems will be consistent with the intent of regional or programmatic fish recovery management efforts and/or plans, developed by the fish and wildlife agencies (e.g., Coho Salmon Recovery Plan).

Any removed/relocated material that can be identified as the property of others will be retained by the Department for three months and then disposed of in accordance with PRC § 5007.5.

0310.8.2 Wood Removal Resource Protection Policy

The Department will strive to use park personnel, or park controlled crews to relocate this material as part of normal job duties. If it is necessary to use commercial tree felling, contractors will possess the correct Timber Operators Licenses and these efforts will be closely monitored by park personnel to ensure park resources are protected to the greatest extent possible. See Natural Resources Handbook for contract language, approved uses of downed wood, and further procedural detail.

0310.8.3 Transport of Wood Infested With Exotic Pests

There are several destructive, exotic pests of native and naturalized trees in California. DPR field staff will comply with all California Department of Food and Agriculture (CDFA) or United States Department of Agriculture (USDA) restrictions in the transport of quarantined pests of woody plants. These can be found in the CDFA [Plant Quarantine Manual](#). Wood containing exotic diseases or insects will not be sold or given away. Wood will not be sold or given away in areas where large numbers of live trees are being killed by high populations of indigenous wood inhabiting insects (e.g. bark beetles) unless the wood can be processed or treated so as to minimize the transport of the pests.

Guidelines for handling diseased or insect infested wood may be found in DOM Chapter 0700, Pest Control.

A weatherproof message will be attached to each firewood bundle that is available for sale to park visitors as follows: "Please purchase only what you will need for your stay at the park. Burn all firewood during your stay or leave unused portion at your site."

0310.8.4 Wood Permit Policy

The DPR 968, Wood Permit, is used to document the transfer of minor amounts of wood from Department-managed lands to DPR employees, clients, members of the public, and other

state departments. A "client" is any non-employee or entity whose activities on park lands are governed by contractual agreement. This includes concessionaires, cooperating associations, California Conservation Corps, California Youth Authority, special events participants, school district staff, individual volunteers and their agents. This form complies with Penal Code § 384.5 relating to the transport of minor forest products on public roads to a location off park property.

The DPR 968 is not used to document: 1) timber or firewood contracts or 2) the sale of processed firewood in bag or bundle allotments to park visitors for use on park property.

Proceeds from wood sales are documented on DPR 197, Report of Collections.

0310.9 Monitoring

An evaluation of the effectiveness of vegetation management programs through the structured collection of data, or monitoring, is needed for active vegetation management programs. Refer to the Inventory and Monitoring Framework document for monitoring methods and standards.

0311 ANIMAL RESOURCES

Animal resources in parks are comprised of individuals and populations of terrestrial and aquatic fauna including marine and freshwater invertebrates, arthropod and arachnid invertebrates, and all vertebrates. For many park visitors the opportunities to observe wild animals in a natural setting and to learn more about natural ecosystems are primary reasons they come to state parks.

The individual animals found within parks are usually genetically related to populations that extend across both park and non-park lands. As local animal populations naturally fluctuate in size, they may become vulnerable to natural or human-caused extirpation when their numbers are low. Periodic disappearance of local populations can occur in a park or a portion of a park. When this happens, persistence of local populations often depends upon opportunities for natural recolonization by individuals from surrounding areas or regions beyond park boundaries.

Some vertebrate and invertebrate animals, such as bats, songbirds, frogs, salmon, and butterflies, migrate into and out of park boundaries at regular intervals. For these animals survival of the species in parks also depends on the existence and quality of habitats outside the parks, and the parks provide only one of the habitats they need.

Because many animals are so mobile, the Department's resource managers need to work with other land managers to encourage the conservation of the populations and habitats of species that cross park boundaries. Cooperation is especially needed between the California Department of Fish and Game (CDFG), the U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) Fisheries. See discussion in DOM Section 0320.

This section sets forth the policies common to all units of the California State Park System for management of these animal resources, including individuals, populations, and their habitats, both terrestrial and aquatic. Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

0311.1 Animal Management Goal

A primary goal of animal management in State Park System lands is to protect, restore, maintain, and interpret natural animal populations and their habitats for the purpose of establishing and maintaining self-sustaining populations in a natural ecological setting.

0311.2 General Animal Management Policy

It is the policy of the Department to implement park acquisitions and resource, facility, and visitor use management strategies that foster long-term sustainability of natural animal populations and the processes that influence the dynamics of animal populations.

In managing animals and animal habitats, the Department will:

- a. Preserve, protect and restore the natural abundance, diversity, dynamics, distributions, habitats, and behaviors of native animal populations and the communities and ecosystems in which they occur, including State and federally-listed threatened, endangered, or otherwise sensitive species;
- b. Maintain functional linkages to other natural areas in order to sustain populations;
- c. Restore native animal populations in parks where they have been extirpated by past human-caused actions;
- d. Minimize negative human impacts on native animals, populations, communities, and ecosystems, and the processes that sustain them while providing opportunities for the public to experience animals native to California;
- e. Protect human health and safety; and
- f. Protect facilities and cultural resources from damage by animals.

Management activities involving the propagation, reintroduction, reduction, or extirpation of native animals may be carried on in the State Park System only where necessary to safeguard the health and safety of State Park System visitors and/or the general public, or when necessary to establish more natural ecological conditions.

0311.3 Genetic Diversity Preservation Policy

The need to maintain appropriate levels of genetic diversity will guide decisions on what actions to take to manage isolated populations of native species or to aid the recovery of populations of sensitive, threatened, or endangered species. When native animals are removed, such as to reduce unnaturally high populations that resulted from human activities, the Department will seek to maintain the appropriate levels of natural genetic diversity. Resource management actions involving the removal or introduction of native animals will be guided by knowledge of the natural range of the species involved, local adaptations, habitat requirements, and the ecological history of the area.

It is the policy of the Department that if deemed necessary, the restoration of animals will be accomplished using organisms taken from populations as closely related genetically and ecologically as possible to park populations, preferably from similar habitats in adjacent or local areas. Deviations from this general policy may be made where the management goal is to increase the variability of the park gene pool to mitigate past, human-induced loss of genetic variability. Actions to transplant organisms for purposes of restoring genetic variability through gene flow between native breeding populations will be preceded by an assessment of the genetic compatibility of the populations.

0311.4 Terrestrial Habitat Management

Management aimed at protecting and maintaining natural vegetation and other essential natural habitat elements will generally provide the necessary habitat conditions for native fauna. Natural habitats are the conditions, both physical and biological, that supported and maintained plant and animal populations for thousands of years. Animal habitat management in the State Park System includes protection from degrading influences or impacts and restoration to a natural state with naturally functioning processes, as well as maintenance of high quality habitat values.

0311.4.1 General Habitat Management Policy

It is the policy of the Department to protect, maintain and restore, where appropriate, natural faunal habitat and ecosystem processes. All aspects of animal habitat and wildlife needs for

particular habitat elements will be considered when planning and/or permitting for facility siting, park operations, maintenance activities, routing trails, visitor use, and special events.

0311.4.2 Beach Grooming

Sandy coastal beaches are prime recreational assets of the State Park System but are also important ecosystems with characteristic physical and biological processes and inhabitants. Beach wrack consists of rafts of offshore kelp that are carried in by the wind and tides and deposited on the beach, providing food and shelter for the organisms that reside in and on it.

Beach grooming, or the routine mechanical removal of trash and other debris, is carried out on some coastal beaches for public safety and/or aesthetic reasons, especially on beaches that are heavily used for recreation. Beach grooming does not refer to annual beach clean-up events or one-time efforts following large storms. Evidence suggests that grooming using mechanical rakes in some instances alters natural beach processes by reducing the establishment of native beach plants, widening the portion of beach exposed to wind transport of sand and potentially exacerbating sand loss.

0311.4.2.1 Beach Grooming Policy

Where needed, coastal districts will develop beach grooming strategies that are appropriate for the primary purpose for which the unit was established, the classification of the unit, the amount of public use the beach receives, and in consideration of potential impacts to natural resource values and processes. The districts should limit the amount or type of grooming used to that necessary for public health and safety, while allowing natural physical and biological uses of beach wrack to continue.

0311.4.3 Habitat Restoration

Past land use and management in and around State Park System units has resulted in a variety of changes to native animal populations and habitats. Determining when habitat restoration is appropriate and feasible often requires an assessment of past, as well as present, animal populations, habitat conditions and land use.

0311.4.3.1 Habitat Restoration Policy

It is the policy of the Department to restore habitat and native animal populations that have been negatively affected by past land use in the parks. Habitats can be manipulated to restore a disturbed or altered natural habitat or to re-create or simulate a natural habitat element or process. Landscapes and plants in park units may also be altered for special purposes, such as to achieve habitat management objectives for a particular species, population, or community. Such alteration will be carried out in a manner designed to restore the natural functioning of the plant and animal community. An example is using prescribed fire to maintain natural ecosystem processes or to manage the habitat of a sensitive species where natural fires can no longer be permitted to occur.

Such management actions will be considered on a site-by-site basis and be made only after review of park management objectives. Restoration requiring active management can benefit from development of resource management plans that address the steps necessary to achieve the restoration goal.

0311.4.4 Habitat Enhancement and Maintaining Human-Created Habitats

Habitat enhancement is the intentional creation of an unnatural/artificial habitat element in the natural environment. Such enhancements, including dredging upland sites to create "new" wetlands, installing bird nest boxes, or building bat roosts, usually do not foster natural animal populations. They are often not naturally sustainable and require high levels of unnatural maintenance.

Native animals occasionally use facilities and other structures that provide some habitat value. Serving as artificial habitat elements, these facilities and structures usually do not

provide stable, long-term habitat for natural animal populations. Protection and maintenance of these artificial wildlife habitat elements such as stock ponds, building cavities, or rip-rap in the parks for the purpose of providing animal habitat is usually not a management objective of the Department.

0311.4.4.1 Habitat Enhancement Policy

It is the policy of the Department to not enhance animal habitats by creating or maintaining artificial habitat elements for the purpose of increasing animal populations above their natural levels in a given area.

Exceptions to this policy may occur when habitat enhancement is determined by the District Superintendent to be ecologically appropriate and sustainable, and not incompatible with primary management objectives.

The following will be considered when determining whether to allow continued use of artificial habitats in structures by wildlife, such as buildings used by bats as roost sites:

- a. Purpose of the structure, and implications of animal use;
- b. Significance of the structure as a cultural resource, and implications of animal use;
- c. Maintenance factors, including costs;
- d. Species of animal involved and the importance of the artificial habitat to the species;
- e. Sustainability and risk factors associated with maintaining the artificial habitat; and
- f. Human health and safety factors.

0311.5 Animal Management

0311.5.1 Animal Protection

To preserve the wide diversity of California native wildlife, in general all native animals are protected in the State Park System.

Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

0311.5.1.1 General Animal Protection Policy

It is the policy of the Department that no person shall hunt, disturb, or harm any kind of animal, including birds, marine mammals, tidepool organisms, and fish, with the following exceptions:

- a. Fish and bait may be taken, other than for commercial purposes in accordance with state laws and regulations;
- b. Animals may be hunted where hunting in a State Recreation Area or within the State Vehicular Recreation Area and Trail System or portion thereof is permitted by regulations;
- c. Animals may be removed when it is part of a research project sanctioned by the Department, described in an approved management plan, or is part of research being conducted by others who have been issued a scientific research and collecting permit (see DOM Section 0313.4.1);
- d. Animals may be removed when it is part of resource management or interpretive activities of the Department that meet specific park management objectives or for public safety and when it is consistent with state and federal laws and regulations.

See specific direction in California Code of Regulations, Title 14, § 4305 and PRC § 5003.1.

0311.5.2 Special Animal Protection and Management

Special species include many of the species listed on the list of special animals maintained by the CDFG. Species listed by state and federal agencies as threatened, endangered, of special concern, and fully protected, and species under investigation as candidates for listing are included on this list. Management actions related to most special species usually require

some special consideration. Recovery plans have been prepared for many of the federally listed species and should be consulted for recommended management actions.

Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

0311.5.2.1 Special Animal Policy

It is the policy of the Department to protect species listed under the federal or state endangered species acts that are native to State Park System units. The Department will conserve listed species and avoid detrimental effects by:

- a. Participating in the recovery planning process;
- b. Working with other agencies to help ensure that any formal delineation of critical habitat, essential habitat, and/or recovery areas on State Park System lands is compatible with State Park System management goals; and
- c. Cooperating with responsible state and federal agencies to support the protection and recovery of listed species by maintaining the species and the habitats upon which they depend and reducing negative impacts when feasible.

0311.5.2.2 Knowledge of Special Animal Localities

The Department will strive to maintain a working knowledge of the occurrence of listed and other special species occurring within park units. Ideally, occurrence and monitoring information will be incorporated into the Unit Data File in both paper copy and in digital form. The location of these species should be noted on maps available to all appropriate staff. Preferably, locations will be defined through use of a Global Positioning System (GPS) and depicted as layers of the Department's Geographic Information System (GIS). However this information is stored, it will be used for General Planning efforts, resource management, wildfire and other emergency response planning, and facility siting. Information on location of sensitive species will not be generally available to the public if the information could lead to disturbance to the animal or increased threat of take, such as through collection. This does not apply to legitimate researchers with projects approved by the Department's natural resources staff.

0311.5.2.3 Park Projects and Animals of Special Concern

Prior to conducting projects such as facility development, habitat restoration, or exotic plant eradication, the Department will determine whether any animal species of concern are found in the proposed project area. The Department will attempt to modify the project to avoid impacts to populations of sensitive animals found in or near to the proposed project area. Permits, such as an Incidental Take Permit from the CDFG (Fish and Game Code § 2081), are required if the proposed project cannot be relocated or re-designed to avoid impacts to animals listed as threatened or endangered under the California Endangered Species Act. Departmental project proponents will consult with the CDFG to obtain any necessary permits.

If a proposed project may cause harm to animals listed under the Federal Endangered Species Act, an Incidental Take Permit from the USFWS or NOAA Fisheries may be required if the project is on Federal property, Federal funds are being used, or a Federal Permit (such as a Clean Water Act 404 Permit) is required. When there is such a federal nexus, the USFWS or NOAA Fisheries should be consulted for guidance in fulfilling requirements of the Federal Endangered Species Act.

Refer to DOM Chapter 0600, Environmental Review, for guidance regarding compliance with the Department's Environmental Review Process.

0311.5.3 Animal Feeding and Human Sources of Food

Animal feeding, either intentionally for recreation or habitat enhancement purposes, or unintentionally through unsecured ice chests or open garbage cans and dumpsters, poses many problems to animals, to park facilities and maintenance, and to visitor safety and the

quality of the park experience. Animals are affected in several ways: nutritionally; by unnatural crowding of the same and different species with the increased possibility of injury, disease transmission or predation (particularly on sensitive species in the park); and by developing unnatural foraging behavior. Intentional feeding by the public of abandoned feral cats is a problem in many units, and the cats prey on native wildlife.

Park facilities can be undermined by artificially increased numbers of ground squirrels, maintenance work may be increased by marauding raccoons, and bears may become a dangerous nuisance when habituated to foraging in campsites. Visitors can be bitten, may be infected with animal-borne disease, and often develop a misperception about how animals live and the appropriate wildlife/human interaction in parks and wildlands. Uninformed concessionaires in some units have sold "animal food," thereby exacerbating the problem.

Staff familiarization and active interpretation to the public is needed to address this issue. Visitors should be discouraged from feeding any wild animal, and State Park staff should interpret the issue of wildlife feeding to the public.

0311.5.3.1 Animal Feeding Policy

In units of the State Park System no person shall feed any wildlife or feral animal [CCR, Title 14, § 4305 (e)].

Posted orders should be used to emphasize feeding prohibition in specific circumstances, and to inform the public of special instructions where needed. No person shall store food, lawfully taken fish or wildlife, garbage or equipment with food residue, other than in the sealed compartment of a vehicle incapable of being opened by wild animals, or in a food storage unit designated by the Department, in accordance with posted instructions. In areas where bears are a problem, refer to the Natural Resources Handbook for further information.

0311.5.3.2 Animal-Proof Food Storage and Garbage Management

The establishment of an integrated animal-proof food storage and garbage management system is essential to managing and protecting both animals and people. To keep all human, unnatural foods away from animals, every source of unnatural foods should be considered: park visitor-generated foods, park management-generated foods, park concessions, and food sources created by adjacent landowners. In addition to preventing intentional and unintentional feeding by visitors, as described above, garbage facilities (both containers and any intermediate garbage storage sites) should be made inaccessible to animals. Garbage pick-up should be scheduled to avoid whatever animal problems occur in the area. Concessions and contractors employed by parks should also keep human sources of food secure and adjacent landowners should be educated to be similarly conscientious with their foods and garbage. Implementation of an animal-proof food storage and garbage system involves teamwork and requires participation by park management, staff and visitors.

0311.5.3.2.1 Animal-Proof Food Storage and Garbage Management Policy

It is the policy of the Department that animal-proof food/garbage management will be practiced in units of the State Park System. Such management practices will be a high priority in black bear habitat and in areas where the availability of garbage to predators could be a factor in the protection of sensitive species.

0311.5.3.3 Supplemental Feeding

Supplemental feeding is the providing of natural or unnatural foods or water to animals to compensate for loss of natural habitat, food, or water. Bird feeders are a common example of supplemental feeding. Some management strategies by other public agencies and conservation organizations advocate supplemental feeding of animals. Park visitors sometimes engage in this practice. Problems associated with supplemental feeding include wildlife malnutrition and disease transmission, missed migration opportunities, inducement of poaching, and increased wildlife damage problems for neighbors. For these reasons,

supplemental feeding is generally not appropriate in the State Park System, even when an animal population is stressed due to climatic shifts or other natural processes.

0311.5.3.3.1 Supplemental Feeding Policy

It is the policy of the Department that supplemental wildlife feeding is not allowed except for the following:

- a. It is part of a Department sanctioned resource management project;
- b. It is a temporary measure in conjunction with an approved resource management plan to restore, recover, or maintain a species, and lasts for no longer than is necessary to compensate for the identified deficiency; and
- c. Analysis indicates that the feeding program will not affect other species of concern or the natural system.

Monitoring is required to ensure effectiveness of the supplemental feeding program and to ensure that it is not causing alteration of the natural system.

0311.5.4 Injured, Sick or Dead Animals

It is natural for wild animals to become weak, sick or injured, and die in wildland environments, and not unusual for animals to be injured or killed by human activities (e.g. vehicle accident). Fledgling birds falling from nests, young animals becoming separated from parents, and animals being injured in confrontations with other animals are all part of the natural process. Perpetuation of natural processes is a primary management objective of the Department.

0311.5.4.1 Injured, Sick or Dead Animal Policy

It is the policy of the Department to allow natural processes to take their course, avoiding the rescue, collection, or disposal of injured, sick or dead wild animals. Exceptions are when:

- a. Public health and safety or nuisance are concerns;
- b. Removal will prevent an unnatural accumulation of scavenger food (drawing other animals into unsafe situations, as onto roads);
- c. Use of the animal/carcass would provide for scientific or interpretive opportunities if collection is permitted by CDFG;
- d. Management of curious people is not feasible;
- e. Rescue and rehabilitation are part of an oil spill response; or
- f. Euthanasia is appropriate, such as in cases of severe injury by a vehicle or vessel.

0311.5.4.2 Stranded, Injured or Dead Marine Animals

All marine mammals and sea turtles are protected under the Marine Mammal Protection Act of 1972 and permits from CDFG, the USFWS, or NOAA Fisheries are required to handle, possess, or dispose of any part of a stranded marine mammal or sea turtle.

In its Marine Mammal Health and Stranding Response Program (MMHSRP) the NOAA Fisheries oversees a national network of stranding centers established to document and provide data on marine mammal and sea turtle strandings and the quality of the oceans. The NOAA Fisheries relies heavily on data collected on State Park System lands. The NOAA Fisheries Stranding Network is authorized by the NOAA Fisheries to collect live and dead marine mammals. In the event of a mass die off or stranding event, an investigative team formed by the NOAA Fisheries will assess causes and take appropriate actions.

0311.5.4.2.1 Stranded, Injured or Dead Marine Animal Policy

It is the policy of the Department to work with the NOAA Fisheries Stranding Network to coordinate when, where, and how stranded marine animals will be removed. If the Department determines the situation is covered by one or more of the exceptions listed above in DOM Section 0311.5.4.1, actions to remove stranded marine animals will be

addressed in a formal Departmental collection permit and/or an MOU that addresses the conditions and procedures of animal removal. The collection permit and/or MOU should address:

- a. A determination/verification of the animal's stranded or injured status;
- b. Notification procedures;
- c. Monitoring of the animal;
- d. Reasons for monitoring, such as assessing the animal's condition, seeing if it leaves on its own, and public health and safety factors;
- e. Follow-up report;
- f. In-place protections (signage, fencing, etc.); and
- g. Removal methods and park/beach access.

Recommended procedures can be found in the Natural Resources Handbook.

0311.5.5 Animal Releases

The release of animals on lands of the State Park System is generally not compatible with the goals of protection of native animals, their habitats, and naturally functioning ecosystems. Depleted animal populations are often restored by restoring essential habitat. However, there may be instances where it is appropriate to re-establish or restore animal populations by adding new animals to existing depleted populations, or by reintroducing species once native to State Park property that have disappeared from their historical range.

0311.5.5.1 Animal Reintroduction Policy

Reintroduction of native animals may be considered if the species occurred naturally in the areas and disappeared as a direct or indirect result of human causes within the last few centuries.

The Department may participate in programs to restore extirpated native animal species to parks whenever all of the following criteria are met:

- a. Adequate habitat to support the species either exists or can reasonably be restored in the park, and if necessary also on adjacent public lands and waters, and, once a natural population level is achieved, the population can be self-perpetuating;
- b. An analysis has been conducted to determine the ecosystem-level effects of the reintroduction;
- c. The species does not, based on an effective management plan, pose a serious threat to the safety of people in parks, park resources, or persons or property outside park boundaries;
- d. The genetic type used in restoration most nearly approximates the extirpated genetic type;
- e. It has been determined that natural re-establishment of the species is improbable but restoration has a good chance for success; and
- f. A restoration plan that analyzes potential release sites, and includes long-term monitoring has been developed.

0311.5.5.2 Augmentation of Diminished Populations Policy

The Department will generally not support augmentation of existing but diminished populations except when the population is seriously threatened with extirpation, and the augmentation is essential to its recovery. Animal releases should only take place if supported by adequate research, called for in an approved recovery plan, and done in cooperation with the USFWS, NOAA Fisheries and/or the CDFG.

0311.5.5.3 Rehabilitated Animal Release Policy

Native animals that have been removed from the wild because of injury or have been subjected to unauthorized removal, or animals which have been kept as pets, are often treated by groups or individuals with the intent of releasing the "rehabilitated" animal back into

nature. Animals may also be transported by well-intentioned persons from sites where habitat is being destroyed by development. Releasing these animals may disrupt natural processes and established ecosystems.

It is the policy of the Department that native animals, including marine mammals, should not be released into units of the State Park System unless the particular individuals are known to have originated in the specific park unit or the release is part of a formal, documented program supported by the Department and the CDFG, or in the case of marine animals, NOAA Fisheries.

0311.5.5.4 Non-Native Animal Releases

Release of any non-native animal, and management of wildlife for recreational purposes through the introduction of non-native game species are inconsistent with maintenance of natural biodiversity, and are not compatible with the Department's management philosophy of protecting native species and ecosystems. Introductions of various game species, including feral pigs and turkeys, have occurred on or adjacent to State Park property. These non-native game species have spread from release sites to State Park property where they are usually protected from hunting. Thus, park units may become refuges for exotic game species and suffer from degradation of natural habitat as a result.

0311.5.5.4.1 Non-Native Animal Release Policy

The Department does not support the introduction of non-native, terrestrial species, including game species, onto State Park System lands, or onto any lands near enough to State Park lands that the non-native animals, or their offspring, may eventually proliferate onto State Park System lands.

0311.5.6 Native Animal Control

While native animals form an integral part of the ecology of park units, nuisance animals can do an unacceptable level of damage to other resources, or pose a significant and unavoidable threat to the health and safety of visitors or employees. Therefore control of nuisance animals can be necessary. Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

0311.5.6.1 Native Animal Control Policy

It is the policy of the Department to control individuals or populations of native species only when one of the following conditions exists:

- a. A population occurs in an unnaturally high concentration and is adversely impacting native communities;
- b. To protect rare, threatened, endangered, or sensitive species when part of a recovery plan;
- c. To protect human health and safety;
- d. To protect specific cultural resources; or
- e. To protect property in situations where it is not feasible to change the pattern of human activities.

Control actions that require the use of pesticides shall comply with DOM Chapter 0700, Pest Control. Control actions that do not require pesticides should be documented, including information on the reason or need for the action, the actions taken and methods used, and the results of the effort.

0311.5.6.2 Mountain Lion Incident Response

The mountain lion in the state park setting is a valuable predator but can also pose a threat to employee and visitor safety. For visitor safety incident protocols, refer to DOM Chapter 1100, Visitor Safety and the Department's Natural Resources Handbook.

0311.5.7 Non-Native Animal Control

Non-native animals can have a significant adverse impact on native ecosystems. When established and left unchecked, population levels of non-native animals can increase and rapidly change their habitat. Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

0311.5.7.1 Non-Native Animal Control Policy

The presence of non-native species is generally inconsistent with the Department's mission of maintaining native species and natural systems. It is the policy of the Department that non-native animals not be maintained in the State Park System except to fulfill State Park management goals.

It may not be feasible to control or eliminate all non-native species or individual animals on State Park System property. The decision to initiate management should include consideration of the following:

- a. The species' interference with natural processes and the perpetuation of natural features, native species or natural habitats;
- b. Evaluation of the species' current or potential impact on other park resources;
- c. The extent to which the species threatens public health and safety; and
- d. The feasibility of control or eradication.

Control actions that require the use of pesticides shall comply with DOM Chapter 0700, Pest Control.

0311.5.7.2 Wild Pigs

The Department and the CDFG signed a general memorandum of understanding that clarifies both departments' general management goals and objectives related to wild pigs. The memorandum acknowledges that wild pigs on State Park System lands adversely impact native plants and animals and that those impacts constitute damage and justify control/removal efforts. This general memorandum and additional guidance material for managing wild pigs, including a template for a unit specific memorandum with CDFG and a feral pig management plan outline, can be found in the Natural Resources Handbook.

0311.5.7.3 Cats

Feral cats (escaped or released onto park property) and free roaming owned cats (from neighborhoods adjacent to park property and State Park housing) prey upon and compete with native small wildlife, carry diseases transmissible to native wildlife, and can pose a public health/safety threat through injury or disease transmission. Feral cat colonies are congregations of cats which gather around a regular or dependable food source supplied and maintained contrary to Departmental regulations by humans (sometimes connected with a supporting organization and following the Trap-Neuter-Release approach). Cats are a non-native species and as such, the Department does not support feral cats or managed cat colonies for the purpose of providing homes for feral cats on its property, pursuant to the policy found in DOM 0311.5.7.1. The Department also does not support the maintenance of colonies on adjacent property, or the translocation of cats or colonies to other areas with natural wildlife habitat values. Guidance for control of feral cats can be found in the Natural Resources Handbook.

0311.5.7.4 Dogs

Unleashed, stray or feral dogs can harass and kill wildlife and can intimidate and injure visitors. Dogs look like a predator to most wild animals. Because of this, even the presence of a dog at a distance, whether on or off a leash, often disturbs wildlife. Dog feces may transmit diseases to native wildlife and increase park maintenance work.

Dogs on State Park property are regulated in the Public Resources Code (§ 5008.1, and § 5008.2) and the California Code of Regulations (Title 14, § 4312). Leashed dogs are only permitted within the limits of campgrounds, picnic areas, parking areas, roads, structures or other areas posted open to dogs. Any exceptions to the above require written authorization by the District Superintendent. The Natural Resources Handbook includes additional information and management guidance on dogs.

0311.5.8 Animal Pests/Nuisance Animals

Control or removal of animal pests or nuisance animals may be undertaken to reduce a threat to natural and/or cultural resources, public health or safety, park facilities, or private property. Only limited removal is normally justifiable. Alternatives to control, such as warning signs, vegetation modifications, or removal or alteration of facilities may be preferable to control/destruction of animals. Actions that can be taken include relocation or modification of facilities or other mitigation of the problems, trapping and relocation, aversive conditioning, and destruction. If it is determined that relocation of nuisance animals would cause additional problems in the relocation area(s), destruction becomes the preferred alternative. Additional guidance on individual species and issues may be available in the Natural Resources Handbook. Refer to DOM Chapter 1100, Visitor Safety.

Exotic invertebrate/insect population increases can occur rapidly and involve extensive areas, be injurious to humans and/or damaging to facilities. All detection and control efforts for these pests on State Park System lands should be coordinated with the appropriate agencies. Refer to DOM Chapter 0700, Pest Control.

0311.6 Aquatic Resources and Fishery Management

Aquatic habitats in State Park System lands occur in rivers and streams, freshwater lakes, reservoirs, and ponds, and in marine intertidal and offshore areas. Because of the various jurisdictions with some responsibility in these areas, including different agencies with authority over the water column, the underlying lands, and associated fish and other aquatic resources in and on the areas, the management of the aquatic environs can be complex.

In general, aquatic ecosystem management on State Park System lands seeks to preserve or restore natural aquatic habitats and processes, and the natural abundance, reproduction, and distribution of native aquatic species, including fish, recognizing the influence of terrestrial watershed processes. Appropriate regulation to prevent the overexploitation of native fish and other native aquatic fauna is normally the most appropriate management strategy for aquatic resources in units of the State Park System. Introduction of aquatic species, particularly non-native species, is usually inappropriate in State Park System units, as are the creation or enhancement (modification, manipulation) of aquatic habitat to develop recreation, and diversions from or alterations of waters in State Park lands. Such actions should only be done after a thorough evaluation of the effects on park resources and values.

However, fishery resources have traditionally supported consumptive uses in some units of the State Park System, and fishing is recognized as a valuable recreational resource. The California Constitution provides the public the right to fish on public lands, particularly if fish have been planted by the State with the intent of maintaining reasonable use of sport fisheries. The Legislature has delegated the regulation of fishing and the enforcement of such regulations to the CDFG (California Constitution, Article 1, § 25; PRC § 5003.1; Fish and Game Code § 1700). The Department may seek a prohibition on sport fishing in park units or areas within units where fishing is incompatible with the management purpose of the park or area, such as in State Reserves or Natural Preserves.

Fishing is one of the primary recreational opportunities in some areas, particularly on reservoirs in State Recreation Areas. Reservoirs, and in some cases channelized or otherwise altered rivers and streams, represent altered environments that may reduce populations of some native species of fish and encourage others. New environments created by the alteration of natural waterways may be most successfully occupied by exotic fish; nevertheless, management activities should give precedence to native over exotic species wherever natives are adaptable to the altered environment.

The Department's management objectives for natural aquatic resources in parks sometimes conflict with CDFG's management objectives, mainly in regard to native fish management in rivers and streams. In such cases, the Department's resource management objectives should be advanced and promoted by park staff.

Diversions from surface waters, or alterations of physical features of streams and lakes, are subject to California Water Law and California Fish and Game Code 1601, respectively; operations of dams and diversions are also subordinate to California Fish and Game Code 5937. Refer also to the Department's Habitat Restoration policy (DOM Sections 0311.4.3.1) for information on dams on State Park property.

0311.6.1 Aquatic Habitat and Animal Protection

In-stream structures for the purpose of habitat manipulation, or the modification of habitat in the context of stream restoration or mitigation, are not appropriate unless the modification is consistent with and for the restoration of natural hydrologic processes and ecosystem function and is consistent with the Department's Habitat Enhancement Policy found in DOM 0311.4.4.1. The modifications, if necessary, should include on-site and natural materials to the extent possible.

0311.6.1.1 Anadromous Fish Policy

Some anadromous fish populations in California have been identified as having unique genetic characteristics, and are considered strains uncontaminated by hatchery stocks. The Department acknowledges the sensitivity of anadromous salmonids and will support the goals of the Salmon, Steelhead Trout, and Anadromous Fisheries Program Act (Fish and Game Code § 6900-6924) to improve and protect conditions in anadromous streams. Anadromous streams on State Park System lands will be managed to restore or protect native anadromous fish and their habitat.

0311.6.2 Aquatic Habitat and Animal Restoration

Necessary in-stream structures in State Park waterways will not impede movements of native aquatic biota upstream or downstream. Unnecessary in-stream structures and dams owned by the Department should be assessed for potential removal, with priority given to those structures that serve as impediments to anadromous and non-anadromous fish passage. Refer to DOM Sections 0306 and 0311.6 for additional information.

0311.6.3 Aquatic Animal Releases – Fish Stocking

The Department may support stocking of native fish for natural resource restoration, or native or exotic fish for recreational fishing only when the habitat is adequate to sustain the species being stocked and the stocking is:

- a. In a State Recreation Area when the purpose is to provide for recreational fishing;
- b. In a State Park when a recreational fishery has been identified by the Department as an important, traditional public opportunity and is shown not to adversely affect native species;
- c. Consistent with a unit's General Plan; or
- d. In support of a native ecosystem restoration effort.

0311.6.4 Aquatic Animal Control

While native aquatic fauna and communities do form an integral part of the ecology of State Park System units, nuisance animals and non-native fauna can have a significant adverse impact on native aquatic ecosystems. When established and left unchecked, population levels can increase and rapidly change the environment in which they occur. Additional guidance on individual species and issues may be available in the Natural Resources Handbook.

It may not be feasible to control or eliminate all non-native species or individual animals in State Park System aquatic habitats. The decision to initiate management should include consideration of the following:

- a. The species' interference with natural processes and the perpetuation of natural features, native species or natural habitats;
- b. Evaluation of the species' current or potential impact on other park resources;
- c. The extent to which the species threatens public health and safety; and
- d. The feasibility of control or eradication.

0312 AESTHETICS

0312.1 Sense of Place

A specific area's value as parkland can include a consideration of the factors, including aesthetics, which contribute to its sense of place. These are the intrinsic values that pertain to the essential and inherent nature of a place -- aspects that are not necessarily defined by law, science, or economics. Sense of place identifies a site's unique experiential essence (sensory, emotional, intellectual, and spiritual) which sets it apart from all other places. It describes the distinctive characteristics that a site possesses; this includes the elements that determine the uniqueness of its landscape, resources, development, and its history. These characteristics are part of what makes a particular site a worthwhile park unit. Components of a site's identity include:

- Physical features and appearance - Consist of the actual physical structure, characteristics, and all visible features of a place. This includes physiography, natural features, cultural features, land use, development intensities, visual quality, community character, climate, seasonal changes, etc.
- Observable activities, functions, and events - How inhabitants or visitors interact with a space, i.e. how the landscape, coast, and the built environment are occupied or used (activity levels and use intensities). This can also include resource activities or events such as whale or bird migrations.
- Meanings and symbols - Concept of place as a cultural artifact, a place's meaning or value beyond its physical elements. This includes people's experiential responses (emotions, feelings, and physical/intellectual stimulation) when they visit a park, and what they later remember about their visit. An example would be the value of Trestles (San Onofre State Beach) to the surfing community and its worldwide renown as one of Southern California's premier surfing locations and role in surfing history.

0312.2 Scenic Values and Viewshed

To park visitors, the scenery offers the most direct and observable indication of the attributes and integrity of units of the State Park System. Ranging in scale from intimate spaces to sweeping vistas, scenic environments are comprised of unified and harmonious visual elements that include natural, and perhaps man-made, features as viewed from within the unit. The principal objective in the management of scenic areas is preservation of the quality of the visual environment. More specific objectives in scenic resource management should be to:

- Identify and protect scenic resources and qualities;
- Avoid or minimize modifications to scenic resources;
- Remove intrusive human-made elements that are not significant cultural resources, including intrusive light and noise;
- Where modifications of scenic resources are necessary, design attractive structures, subordinate to the character of their surroundings and that appear to belong to their setting, in sympathy with the sense of place;
- Locate structures in the background as much as possible, isolated from primary views;

- Utilize visually harmonious materials, colors, textures, and scale that blend into and are subordinate to their landscape's background; and
- Unify structures on the site with a consistent style of architecture and materials.

The aesthetic of scenic resources can be highly subjective. It is impossible to list all the considerations that might be included in scenic review which must be constantly in the mind of Department employees who have responsibility for scenic resources.

Protection of scenic resources goes beyond park boundaries. The impact of poorly sited development out of scale with its surroundings, employing contrasting colors or reflective surfaces outside of a park boundary can be as bad as or worse than if sited within.

0312.2.1 Scenic Protection Policy

It is the policy of the Department that in each State Park System unit, environmental quality will be such that visitors are aware of being in a place of special merit because of their surroundings both within and without the unit. Manmade features within the unit and their maintenance will have special characteristics, which, in total, express a feeling of environmental integrity that differs from areas where degrading and undesirable features and intrusions are commonplace. In particular, non-directional signs should be unobtrusive and subordinated to the character of their surroundings. Protection of a park's unit's viewshed requires being alert to and participating in the planing and regulatory processes of other local, state and federal agencies.

0312.3 Lightscape

The natural lightscapes of parks are natural resources and values that exist in the absence of human-caused light. The absence of light in caves and at the bottom of deep bodies of water influences biological processes and the evolution of species, such as the blind cave cricket. The stars, planets, and earth's moon that are visible during clear nights influence humans and many other species of animals, such as birds that navigate by the stars or prey animals that reduce their activities during moonlit nights.

0312.3.1 Lightscape Protection Policy

Recognizing the roles that light and dark periods and darkness play in natural resource processes and the habitat of species, the Department will protect natural darkness and other components of the natural lightscape in parks. To prevent the loss of dark conditions and of natural night skies, the Department will seek the cooperation of park visitors, neighbors, and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks. The Department will not use artificial lighting in sensitive locations where the presence of the artificial lighting will disrupt dark-dependent natural resource components of a park. The Department will:

- a. Restrict the use of artificial lighting in parks to those areas where security, basic human safety, and specific cultural resource requirements must be met;
- b. Utilize minimal impact lighting techniques;
- c. Shield the use of artificial lighting where necessary to prevent the disruption of the night sky, natural cave processes, physiological processes of living organisms, and similar natural processes; and
- d. Participate in the review process for developments adjacent to parks that may create impacts from lighting

0312.4 Soundscape

Natural soundscapes exist in the absence of human-caused sound. The natural soundscape is the aggregate of all the natural sounds that occur in parks, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive, and can be transmitted through air, water, or solid materials.

0312.4.1 Soundscape Protection Policy

The Department will preserve, to the greatest extent possible, the natural soundscapes of parks from degradation due to noise (undesirable human-caused sound) and will restore degraded soundscapes to the natural condition wherever possible. The Department will take action to prevent or minimize all noise that, through frequency, magnitude, or duration, adversely affects the natural soundscape or natural resources (e.g. loud motorized equipment during critical mating and rearing periods).

0312.5 Odor

Odor is the property or quality of a thing that affects, stimulates, or is perceived by the sense of smell. Odors are naturally produced and chemically based, and transmit information that is received by living organisms. Animals, plants, and geologic materials release natural chemicals involved in the transmission of information through air and water. Many animals can perceive these natural chemicals and modify their behaviors, such as mating, migration, feeding, predator avoidance, prey selection, and the establishment of social structures, as a response.

Departmental activities may alter the natural flow of chemical information such as through the introduction of pesticides or pheromones into parks as part of an integrated pest management program or through vegetative modification which may affect the kinds of natural plant chemicals released to the air, water treatment, or concentrations of engine exhausts.

0312.5.1 Odor Policy

It is the policy of the Department to preserve, to the greatest extent possible, the natural flow of natural chemical information and odors by preventing the release of human-generated chemicals that can block the release, deposition, or perception of natural chemicals and by reducing or eliminating human actions that disrupt or commingle the pathways through which natural chemicals are dispersed. Whenever the Department engages in activities that disrupt the natural flow of natural chemical information or odors, it will comply with all applicable laws, regulations, and policies, and seek to minimize harm to the environment.

0313 RESOURCE MANAGEMENT PROGRAMS

0313.1 Funding Programs

Natural resource management funding programs provide for restoration and protection of natural ecological systems within units of the State Park System. Actions funded through such programs are aimed at maintaining natural systems in a healthy condition by preventing and removing unnatural elements and influences, and by restoring natural elements, processes, and conditions. Actions are differentiated from other related Departmental programs in that they:

- May include structures to protect natural systems – fences, boardwalks, interpretive signs;
- Do not include work on natural components of a facility such as campground vegetation;
- Do not include work to protect natural components or systems as a result of facilities or their use such as erosion from a road or trail;
- Do not include work to protect facilities from natural systems such as streams, landslides, beach erosion, exotic species in a facility area, wildfire breaks around facilities and structures;
- Do not include work to maintain fire roads and park perimeter fire breaks; and
- Do not include actions for the protection of the public from natural resources such as tree hazards, insects, or animals in facility areas.

0313.1.1 Natural Resources Maintenance

The perpetuation of natural resources, ecosystems and constituent elements in a desired condition is dependent on a systematic and regular program of resource maintenance. A fundamental reason why a continuous maintenance program is needed is that natural resources and processes are dynamic and in constant flux and change. Some examples:

- Vegetation continues to grow, fuels accumulate, forest and plant community structures change.
- Plant communities shift over the landscape and progress through successional changes. Some parks have been established to preserve lower successional stages that need to be maintained.
- Animal populations and activities continually change. The area where a sensitive bird species may nest can change from year to year.
- Exotic plants and animals continuously arrive in and spread throughout parks.
- Pests and diseases of native plants and animals continue to threaten fragile resources.
- Wildfires and floods regularly occur, creating resource upheavals, exacerbating erosion and stream sedimentation problems.
- Changes in adjacent land uses and activities pose ongoing threats and changes to natural systems and values of parks.

0313.1.1.1 Natural Resources Maintenance Program (Category 1, H)

The Natural Resources Maintenance Program is a support budget based program that is part of the Department's park maintenance program. Funding is provided annually for Category 1, H maintenance. Category H designates natural resource maintenance that includes routine and recurring activities necessary to maintain the condition of natural resources and processes.

Maintenance activities are structured in a systematic approach. Routine maintenance is anticipated or expected work recurring on a daily up to five-year frequency, involving actions to or for a natural heritage resource and designed to maintain the status quo of natural conditions and processes. Recurring maintenance work is cyclic work that is needed on a regular frequency. Status quo limits ongoing maintenance to maintaining current conditions by preventing further degradation. Restoration of damaged or degraded natural resources is accomplished through individual restoration projects funded through separate programs.

0313.1.1.1.1 Natural Resources Maintenance Program Goals

The goals of natural resource maintenance are to:

- Perpetuate natural resources and their values;
- Provide a uniform, orderly, and continuous programmed effort; and
- Maximize program effectiveness and efficiency.

0313.1.1.1.2 Management Units

The structure for organizing and scheduling natural resource maintenance activities is the resource management unit. Resource management units are defined areas of land with distinct boundaries. Each park unit is subdivided into a number of resource management units, each with its own unique identifier. Management units are typically based on permanent features where the boundaries are not likely to change. Management units define manageable-sized areas for organizing and scheduling maintenance work. A management unit often includes lands with similar resources and management objectives. For each management unit, maintenance activities are identified and scheduled accordingly.

By their very nature some management activities, such as prescribed burning and exotic pig control are applied over multiple management units or the entire area of the park. These maintenance activities are organized and scheduled under a unitwide management unit designation.

0313.1.1.1.3 Management Unit Data Sheet

For each management unit, a data sheet is maintained containing information on resources and conditions within a management unit. Data is used to identify appropriate levels of work in budgeting and scheduling individual maintenance activities. Data sheets include information on resources and conditions as well as their size, ruggedness, and remoteness or difficulty in gaining access.

0313.1.1.1.4 Resource Maintenance Activities and Schedules

Natural resource maintenance work is systematically planned and scheduled for each management unit in which maintenance work is needed. Work is defined by activity, job classification required to do the work, maintenance cycle, time per cycle, and associated "work costs." Work costs include tools, materials, contracts, and equipment. Budgeting for work activities is standardized for uniformity and efficiency.

Examples of major resource maintenance actions include:

- Exotic plant control – activities to control and eliminate new encroachments and prevent the further spread of existing infestations;
- Fuel management and prescribed burning – activities involving the application of fire to park ecosystems and selective thinning in sensitive or prohibitive burning areas to maintain natural fuel loads;
- Revegetation – activities to offset the gradual loss of vegetative cover from trampling and volunteer trail impacts in natural areas through reseeding, planting, and the placement of materials to prevent soil loss;
- Succession management – activities to maintain natural plant community composition and structure in natural areas, often involving the removal of vegetation;
- Rare and Endangered Species protection and management;
- Animal control – activities to control and eliminate feral and non-native animals; and
- Monitoring – activities involving measurement and documentation of natural resource change to guide resource management.

0313.1.1.1.5 Annual Inspections of Resources

Annual resource inspection is a foundational activity in maintaining resources. The purpose of inspections is to have a current familiarity with the condition of resources and to cut off damage factors before they cause significant loss or develop into costly problems. Inspections also may identify the need to watch something more closely or to scientifically monitor. All management units with maintenance schedules have routine inspections.

0313.1.1.1.6 Computerized Maintenance Management System

Annual and two - five year natural resource maintenance work is scheduled and documented through use of a computerized system. This documentation for all management units includes the tasks, resources, and schedules to be undertaken. The level of effort and expenditures for all maintenance tasks are recorded and maintained for program guidance and future planning and budgeting.

0313.1.1.2 Statewide Natural Resource Management Program

The Statewide Natural Resource Management Program is a support budget based program created in 1980 and funded annually. It provides support for natural resource management within the State Park System by training, equipping, and providing for the management of a professionally trained team of prescribed burning specialists. The program also funds annual statewide database subscriptions, acquisition of aerial photography, and other systemwide needs.

0313.1.2 Natural Resource Restoration Projects

Lands acquired for the State Park System are often ecologically degraded from previous uses, requiring their restoration to conditions that allow healing and recovery. Also, lands that have been under the Department's management may have become degraded due to the lack of adequate resources to maintain them in a healthy condition. Such lands may be degraded to an extent that their recovery cannot be accomplished within the support-based maintenance program. Restoration of these resources is often addressed through restoration projects that meet specific objectives and are accomplished within specific timeframes.

0313.1.2.1 Natural Heritage Stewardship Program

The Natural Heritage Stewardship Program, initiated in 1984, is a bond-funded program specifically for the protection, restoration and enhancement of natural heritage resources within the State Park System. The program consists of many individual projects involving the direct management of the resource rather than its engineered protection, focusing on ecological rather than construction approaches. The program also does not include projects that are plans, studies, or data collection other than as part of project work involving direct action to a resource.

Projects are expected to resolve a problem or to reduce it to a point where it can be managed through support budget means. Projects are not for ongoing or recurring resource maintenance needs.

Natural Heritage Stewardship Program projects typically have one or more of the following objectives:

- Remove or control exotic organisms in natural areas;
- Revegetate natural areas;
- Correct excessive erosion that threatens natural systems and scenic features by restoring natural conditions;
- Reintroduce organisms extirpated from a natural system or area;
- Protect, restore, or enhance critical natural communities or rare, threatened, or endangered species and their habitats;
- Restore natural processes such as tidal action or flooding when such processes can be accomplished by a short-term corrective action.

Stewardship projects are often multi-year in scope but are designed and funded in annual phases. Projects typically compete on a statewide basis and are selected from the Department's Park Infrastructure Database (PID).

0313.2 Fire Management

Wildland fire, whether human-caused or naturally ignited, may contribute to or hinder the achievement of park management objectives. Therefore, park fire management programs will be designed to meet park resource management objectives while ensuring that firefighter and public safety are not compromised.

0313.2.1 Wildfire Management

The Department manages unwanted wildland fires to protect people, property, and the natural, cultural and scenic resources of the park system. Although lightning-caused fires and burning by Native Americans occurred for thousands of years in many California ecosystems, present day unplanned fires can have deleterious effects on natural resources due to unnatural buildups of combustible vegetation. However, fire suppression activities, such as bulldozer fire control lines, can sometimes have greater adverse impacts on park resource values than the fire itself.

The Department's goal is to prevent all unplanned human-caused fires on its lands. Given that some unplanned fires will occur, both lightning-caused and human-caused, it becomes

the Department's responsibility to protect human life, and to minimize damage to park facilities and resources from wildfires and from all suppression activities.

Management actions for wildland fires on Department lands involve pre-fire planning, fuel (vegetation) management, public safety measures, fire control support, post-fire evaluation and rehabilitation.

0313.2.1.1 Wildfire Management Planning

The Department can best protect its facilities, natural and cultural resources, and personnel and visitors by maintaining a park unit wildfire management plan that provides park staff and appropriate fire suppression personnel with important information on park infrastructure, resources values, and general suppression tactics before a wildfire occurs. The format for unit wildfire management plans can be found in the Natural Resources Handbook.

A park unit's wildfire management plan, when approved by the Department of Parks and Recreation and the Department of Forestry and Fire Protection (CDF) or its agent, is designated as the local fire protection agreement for the park unit.

Since most of the firefighters on a large conflagration are unaware of the Department's ownership, land management objectives and resource concerns, park staff should describe these concerns directly to the appropriate firefighting staff during these emergencies. This combination of planning and on-the-ground communication during a wildfire incident can be highly effective in preventing unnecessary damage to park resources and facilities. It can also facilitate rapid repair of damage to parklands.

0313.2.1.1.1 Wildfire Management Planning Policy

It is the policy of the Department that each Department-operated unit that may experience wildland fires will have a wildfire management plan providing requisite information for managing wildfire events, such as the locations of sensitive park resources, facilities, water supplies and existing roads. Wildfire management plans will be reviewed by designated headquarters staff and approved by the District Superintendent.

0313.2.1.2 Vegetation Management and Fuel Modification

The Department maintains wildland properties in order to preserve the natural, cultural, and scenic features for the people of California. Many of these native ecosystems contain plants that can become flammable under specific environmental conditions of high wind, high temperature and low humidity. These ecosystems inevitably burn either from natural or human causes. Buildings constructed adjacent to park units in the wildland-urban interface zone are at risk from wildland fires. There are three principal causes of ignition of structures in this zone.

The first cause involves the ignition of accumulations of ignitable materials on, under, or next to the structure, which, in turn, ignite decking or enter attics through soffit vents. This material can be ignited via ground fires or aerial flaming brands. This threat can be eliminated by removing all flammable debris that has accumulated on or under the building, clearing the vegetation that is within 30 feet of the building, and screening all openings to the attic or under the structure.

The second cause involves aerial flaming brands, which land directly on flammable surfaces of the structure. These brands can originate from wildfires over one half-mile away from the structure. Buildings that are constructed to strict codes of ignition-resistive materials are at very low risk of ignition from flaming brands.

The third cause is severe radiant/convective heat of burning material near the structure which can: 1) ignite the sides of the building, 2) break the windows, allowing burning embers into the interior of the building, 3) ignite the interior furnishings through the windows, or 4) burn/deform the window casings causing the windows to slip out.

Fire modeling, analysis of past wildland-urban interface zone fires, and experiments to determine the ignitability of structures have confirmed that even the radiant/convective heat of extreme flaming fronts poses low risk to any structure which is 130 feet or more distant, especially if that structure conforms to strict interface fire codes of ignitability, and window strength and reflectivity.

The Department routinely receives requests/demands from outside entities to clear wildland vegetation on Department lands in order to:

1. Reduce the threat of wildfire to private property;
2. Reduce fire insurance costs to private landowners;
3. Comply with strict local ordinances; and
4. Mitigate the threat of liability for maintaining a dangerous condition.

Department lands have also been subjected to trespass and encroachment by persons illegally attempting to modify the vegetation. Modifying ecosystems on park properties for the purpose of protecting adjacent private structures from wildland fire can significantly degrade park values and in some cases adversely impact populations of threatened endangered species and cultural resources.

0313.2.1.2.1 Flammable Vegetation/Fuel Modification Policy

It is the Department's policy to prohibit the construction and maintenance of firebreaks, fuelbreaks, and other fuel modification zones on Department lands, except when:

- a. Required by state law to clear around its structures/facilities;
- b. Previous legal commitments have been made to allow the creation and maintenance of fuel modification areas;
- c. It is critical to the protection of life or park resources; or
- d. Park vegetation 130 horizontal feet from a non-Department habitable structure is capable of generating sufficient radiant/convective heat when burning under Red Flag Warning conditions to ignite the habitable structure.

All identified and approved fuel modification zones will be described in the unit wildfire management plan and will be constructed and maintained to the Department's standards (refer to Natural Resources Handbook). All proposed fuel modification projects must be reviewed for environmental impacts (see DOM Chapter 0600, Environmental Review). All other areas previously modified for fire protection purposes but not meeting the above exceptions will be returned to natural conditions.

Fuel modification proposed by CDF and in keeping with Local Operating Plans will be carried out by CDF only after review and approval by the District Superintendent, in keeping with Department Policy. In those circumstances, CDF is to ensure all necessary permits, CEQA, and other requirements are met prior to proceeding with such work.

The Department will actively participate in the local land use decision process to prevent conflicts with this policy. DPR 181, Wildfire Protection, should be used as a template to convey the Department's objectives when corresponding with local landowners and regulatory and permitting entities.

0313.2.1.3 Closure of Fire-Damaged Areas

All or a portion of a park unit may be closed when an unwanted wildland fire is threatening or burns on Department lands (see DOM Chapter 1100, Visitor Safety). Areas of a park unit which have burned will remain closed until appropriate Department staff have inspected the area and rectified any public safety, property or resource protection issues.

0313.2.1.4 Reporting

Written reports and maps are needed to maintain a history of fires affecting each Department park unit. This is useful information for ecosystem research and future prescribed fire and

wildfire management planning efforts. For large conflagrations, Incident Action Plans, status reports, and maps are very important de-briefing information and aid in the identification of resource damage in need of repair.

Each unwanted wildland fire that burns on, or threatens, Department lands, regardless of origin, will be recorded on a DPR 385, Public Safety Report with a completed DPR 385A, Public Safety Report Supplemental - Natural Hazards, Wildfires. In addition, a prescribed fire/wildland fire summary should be completed for each wildland fire. For reporting purposes, this does not include fires burning solely in vehicles, structures, or refuse.

0313.2.2 Prescribed Fire Management

Recurring fires were an integral part of the evolution of most wildland ecosystems in California. Although the restoration of fire as an ecological process remains an important goal, fire is also used to reduce threatening accumulations of fuels, control exotic plant species, protect forest soils, restore native plant assemblages, and improve habitat for wildlife. Prescribed fire is applied within appropriate ecological parameters. Fire is a disruptive influence in any ecosystem, and must be used with assurance that the end result will be consistent with the Department's mandate to preserve and protect California's natural heritage.

0313.2.2.1 Prescribed Fire Management Policy

It is the policy of the Department to restore fire to its proper role in native ecosystems in accordance with the broader charge to restore and perpetuate natural ecological processes in the natural environments of the State Park System. Other important objectives consistent with the policy to restore fire to native ecosystems are the prevention of damaging fires from excessive fuel load and abnormal plant community structure, the improvement of wildlife habitat, the control of exotic species, and various other ecological objectives.

0313.2.2.2 Organization and Responsibilities

Both headquarters and district staff have major roles in the Department's prescribed fire management. The Natural Resources Division is responsible for developing systemwide policies, guidelines and standards, administering Department-wide funding and establishing system-wide priorities. Districts are responsible for developing and implementing unit-specific prescribed fire management plans and project burn plans and coordinating with other agencies at the field (local) level.

0313.2.2.3 Qualifications and Training

Restoration of fire to wildland ecosystems of the State Park System requires persons skilled in the art and science of prescribed burning. Prescribed fire, applied by those knowledgeable in its use, can be an obedient servant; but when used by inexperienced persons, fire can rapidly become a violent and destructive force. The ecological effects of prescribed fire can also be devastating when applied improperly. Consequently, the Department must have fully trained and experienced personnel who can plan, direct, and execute fire management projects effectively.

The Department's training program in prescribed fire management will maintain the highest standards, and meet any qualifications commonly recognized among agencies conducting prescribed burns.

The Department will provide training to all specialized fire management personnel. Only those persons who have completed the Department's training program, or one recognized by the National Wildfire Coordinating Group will be allowed to plan, manage, and conduct prescribed fire projects on lands of the State Park System.

0313.2.2.4 Prescribed Fire Burn Boss

The burn boss is responsible for enforcement of safety standards on prescribed burns under his or her direction. When the situation dictates, the burn boss should appoint a separate safety officer to insure that these standards are met.

Burn bosses are highly trained individuals who have successfully completed a rigorous training program, consisting of both formal classes and field experience. Candidates for burn boss must first serve at other positions within the prescribed fire incident command structure, including prescribed fire crewmember, holding specialist, and ignition specialist, and must be selected for entrance into burn boss training by either of the program coordinators. Classes required for qualification as a burn boss include smoke management, fire behavior calculations, and a course on the role and duties of a burn boss. Candidates must also complete training burns, conducted under the direct supervision of a qualified burn boss.

A Department employee who was qualified as a burn boss by another agency with training requirements similar to the Department's, may be granted burn boss status by the Chief of the Natural Resource Division.

0313.2.2.5 Health and Safety

Prescribed burning operations could pose health and safety problems for park system visitors and other persons, both within and outside of State Park System lands. Personnel who plan and execute prescribed burns are responsible for anticipating such problems and making appropriate plans to address them.

Health and safety of the public, both within and outside State Park System lands, will have high priority during the planning and execution of prescribed burns. Appropriate actions will be taken to protect the health and safety of the public during prescribed burning operations.

The Department will insure that employees are appropriately trained and able to conduct their work in a safe manner. Although prescribed burning is a physically demanding and inherently hazardous duty, this does not mean the Department's responsibility is lessened. Indeed, the Department must ensure that prescribed fire activities receive the most stringent review of potential risk and hazard to personnel, and that these are mitigated to the fullest extent possible.

0313.2.2.6 Planning

The restoration of fire as an ecosystem process should be approached holistically and integrated with the planning for other resource management objectives.

The implementation of prescribed burning requires careful and thorough planning and documentation. Planning documents for implementing prescribed fires in units of the State Park System are 1) the unit prescribed fire management plan; and 2) the project burn plan.

0313.2.2.7 Unit Prescribed Fire Management Plan

The unit prescribed fire management plan sets forth the objectives and details of a unit-wide, multi-year program and is reviewed under CEQA for environmental compliance. It is required when project burning for a unit expands beyond small single-purpose burns or experimental burning of a limited nature.

0313.2.2.8 Project Burn Plan

The project burn plan defines the objective, setting, constraints and parameters of a specific burn including the desired environmental consequences and the need for safely manipulating fire to achieve the desired objectives.

A project burn plan provides sufficient information to allow for an environmental review of potential impacts, as required under CEQA. When treated as a "stand-alone" document the

project may be granted a Categorical Exemption, or more stringent environmental review may be required. Alternatively, project burn plans may be done under a programmatic, unitwide burn plan (unit prescribed fire management plan) that has undergone environmental review. Under these circumstances, the project burn plan must demonstrate (through the PEF process) that it is substantially in compliance with the environmental review of the unitwide plan, and therefore exempt from further review. If it is not, then the project burn plan should be treated as a “stand-alone” document.

In either case – whether an overall unit prescribed fire management plan exists or not – project burn plans are essentially the same. The difference is in the degree of required environmental review.

0313.2.2.8.1 Project Burn Plan Preparation Policy

A project burn plan is required for every application of prescribed burning including burning conducted under a unit prescribed fire management plan. The Department has a recommended format for project burn plans (see Natural Resources Handbook). Variations in structure and content may occur based upon circumstances unique to the project or unit, or because of special documentation or formatting required by cooperating agencies. In all cases project burn plans must include:

- a. Purpose and objective of the project;
- b. Complexity Rating;
- c. Risk Analysis;
- d. Environmental setting;
- e. Project constraints;
- f. Prescription, and weather forecasting;
- g. Ignition plan;
- h. Holding plan;
- i. Contingency plan;
- j. Smoke management;
- k. Public notification;
- l. Location and project maps;
- m. Incident Action Plan; and
- n. Go-No Go Checklist

It is Department policy that prescribed burns not be conducted in units that do not have a Department-approved wildfire management plan (see DOM Section 0313.2.1.1.1) unless specifically authorized by the District Superintendent. In the event such authorization is given then special conditions apply (see DOM Section 0313.2.2.9.2).

Project burn plan preparation should begin with completion of a Prescribed Fire Complexity Rating (DPR 71) and a Risk Analysis. These evaluations identify the constraints and conditions of a proposed burn, establish a level of operational complexity and need, and have a bearing on subsequent planning.

Since the plan is primarily an operational document detailing the application of fire, the burn boss is ultimately responsible for assuring the plan is complete, accurate, and functional. During the implementation of a burn, the burn boss is also responsible to make sure that all requirements and conditions itemized in the plan are met.

0313.2.2.8.2 Project Burn Plan Review, Approval, and Filing

At a minimum, each project burn plan must be approved by the District Superintendent (or the Sector Superintendent if so delegated by the District Superintendent), the district resource ecologist, and the burn boss responsible for undertaking the project. Other approvals may be required locally, such as a representative from CDF or the local air pollution control district.

If a burn boss trainee prepared the project plan as a training exercise, then the preparation must be done under the direct guidance of a qualified burn boss. The burn boss assumes full responsibility for the plan, and signs as the project burn boss.

The score of the project's complexity rating may necessitate additional reviews and approvals. Projects scored as "Low" generally need no further approvals within the Department. Projects scored as "Medium" require plan review and approval by a second burn boss. Projects that score as "High" require an on-site review by either the Statewide or Southern California Prescribed Fire Coordinators.

If a project is to be conducted in a unit lacking a wildfire management plan, then the following reviews and approvals apply, again based on the Complexity Rating. In addition to the basic approvals described above, a project with a complexity rating of "Low" requires a second review by a qualified prescribed burn boss. A score of "Medium" requires an on-site review and approval by either the Statewide or Southern California Prescribed Fire Coordinators. A project with a rating of "High" cannot be conducted in a unit that lacks a wildfire management plan.

Prior to ignition all project burn plans must be complete and on file at the district and at NRD in Sacramento. Plans submitted to NRD shall include all required elements excepting the incident action plan, which is prepared at the time of burning.

0313.2.2.8.3 Adherence to Project Burn Plan

A project burn plan cannot provide for all contingencies, and must therefore be somewhat flexible. Developing a plan requires that areas where flexibility will be needed be identified early in the process of plan development and built into the plan.

Once the plan is finalized, it cannot be altered without approval from all original signatories, unless the change is not substantive. For instance, the burn boss or project manager may identify the need to make additional public notifications, which would not substantially alter the plan itself. If, however, meeting the project's objectives requires using an ignition pattern that is not identified in the plan, changing the plan would be substantive, and not allowed without a second review.

0313.2.2.8.4 Alteration of an Approved Project Burn Plan

If substantive changes are needed to accomplish a project, a plan can be amended only if all original reviewers approve in writing, and if a determination is made that the change does not alter conditions to the extent that another environmental review is required.

Minor and non-substantive changes may be made only by the burn boss. These changes should be made part of the final documentation of the project.

0313.2.2.9 Implementation

All prescribed burns will be conducted under the Incident Command System. Typically this will mean the burn boss will serve as the incident commander, although under certain circumstances, particularly multi-agency projects, a joint command structure may be established.

0313.2.2.9.1 Incident Action Plans

An incident action plan will be prepared for each day of operation during burning. This plan will include, at a minimum, a map, assignment sheets, a medical plan, and a communication plan.

0313.2.2.9.2 Briefings

As provided for within the Incident Command System, daily briefings are required for all prescribed burns. Briefings will include a review of the incident action plan, especially the following:

- A description of the command structure;
- An explanation of roles and responsibilities;
- A review of safety concerns;
- Communication procedures; and
- Emergency procedures, including medical emergencies.

0313.2.2.9.3 Fire Escapes and Fires Out of Prescription

Prudent management requires prompt suppression of all escaped fires, spot fires outside of the unit perimeter, and all burns that are exceeding desired fire behavior. The manner in which these events will be evaluated and dealt with is addressed in the contingency planning section in all project burn plans.

If, during the ignition of a prescribed burn, the environmental conditions change so that the desired fire behavior is not being met, the burn shall be suppressed as soon as possible and with the least amount of resource damage. All spot fires that are beyond the project burn boundary lines shall be immediately contained.

Suppression action will also be taken on prescribed burns if one or more of the following conditions exist:

- People, facilities, and/or personal property are threatened;
- The fire has spread beyond the planned limit of the burn and additional resources are required to control it;
- Smoke is posing a hazard or is an unacceptable nuisance.

All escaped prescribed burns must be reported orally and in writing to the District Superintendent as soon as possible. The District Superintendent will review the incident, and determine if any further action is required. Further actions could include, but not be limited to, the following:

- A request for additional information from the burn boss;
- Further review by a qualified individual or panel;
- Establishment of a formal review panel.

The establishment of a formal review panel would usually occur only in cases where the incident was especially serious, or where the actions of personnel on the scene may have been negligent. Therefore, the review panel must include at least one other qualified burn boss from the Department and the Chief of the Natural Resources Division.

0313.2.2.9.4 Pile Burning in Wildland Settings

Pile burning in wildland settings may require an abbreviated project burn plan, depending on a variety of circumstances. These include project location and size, duration of burning, probability of escape, potential impacts, and project objectives. Pile burning conducted in a wildland setting should be evaluated through the risk analysis and complexity rating system (DPR 71).

A project burn plan must be prepared when any one of the following conditions is met:

- a. Risk analysis identifies a potentially significant problem; or
- b. Complexity rating score is 60 or more.

An abbreviated project burn plan, when required, shall include a project description, complexity rating, risk analysis, prescription, holding plan, and contingency plan. Project burn plans for pile burning must be reviewed and signed by the burn boss responsible for the burning and the District Superintendent. A project burn plan can be programmatic and cover all planned pile burning in a unit for a season. Plans shall be kept on file in the district.

0313.2.2.10 Project Burn Summary Report

Burn bosses shall prepare a daily summary report during a prescribed burn (DPR 72, Prescribed Fire Daily Report). This report shall be submitted to District Superintendents by noon of the following day. At the completion of the burn, copies of the daily summary report(s) shall be submitted to NRD. Submittals may be made via fax or e-mail.

0313.2.2.11 Relationship to Other Agencies

The Department is one of several land management agencies that conduct prescribed burns. In addition, private landowners may conduct their own burns, usually by contracting with the CDF. Situations often arise where burn projects conducted by the Department may be conducted jointly with other landowners and/or agencies.

0313.2.2.12 Interagency and Cooperative Burns

When burns are conducted with other agencies, project burn plans must address the needs and concerns of all agencies. A unit or district that is planning a cooperative or inter-agency burn should consult with the Department's prescribed fire coordinators prior to the preparation of a plan.

Note that this does not apply to agencies that are simply assisting the Department in conducting a burn by providing resources. It typically does apply to CDF Vegetation Management Program burns, cross-boundary burns, and projects in which the command is either joint with another agency, or turned over entirely to another agency.

0313.2.2.13 Cooperative Burn Policy

Cooperative burn project agreements involving two or more owners may be entered into for any State Park System lands. All cooperative boundary burns implemented jointly by the Department and another agency will be conducted in a manner consistent with all of the policies set forth in this document and must have prior approval by the District Superintendent. All planning documents required of a prescribed burn conducted by the Department staff shall be required of the outside agency, as well as all reviews and approvals.

0313.3 Information and Data Management

Natural resources data may consist of numerical information from counts and measurements of park resources, narrative accounts of park resources, photographs, maps, or collections of voucher materials. Data may be obtained from Department personnel, consultants, scientists using the parks as research platforms, or park visitors. Data may derive from routine inventory and monitoring projects, post-project monitoring following development projects (such as roadside revegetation following construction of a new road), post-project monitoring for natural resource projects (such as spraying herbicide on exotic plants or removal of a dam), post-disturbance monitoring (such as following a coastal oil spill), or research projects that target very specific questions and natural resources and that require intensive study design and field procedures. The purpose of Information and Data Management is to maintain this information/data for future use by park managers and ensure the investment that went into its collection is not squandered.

The goal of Information and Data Management is to maintain digital and hard copies of information and data regarding Department natural resources in a manner that is secure and readily useable.

0313.3.1 Information and Data Management Policy

Collection of natural resources data, including the field protocol used, metadata collected, and location/mapping methods should conform to the standards contained in the Department Information and Data Management Handbook.

All districts will follow the standards for use of geographic information systems (GIS) contained in the Department Information and Data Management Handbook.

0313.3.2 Unit Data File

All data obtained about natural resources in a park unit should be maintained in the Unit Data File. The Unit Data File is an organized way to store and manage diverse types of data (paper documents, computer files, photographs, and maps).

The Department has maintained digital natural resources data in several ways, including in the CalParks Flora & CalParks Fauna Biological Inventory System database. A computer based system, when available, will provide staff the opportunity to enter natural resource data.

0313.3.3 Standards

It is important that natural resource inventory and monitoring information be collected in some kind of standard fashion to allow for the comparison of data from one site to another, as well as from the same site over time. Data collection and management standards have been developed for the Department including metadata requirements for field forms, global positioning system (GPS), geographic information system (GIS), and data entry and storage databases. Metadata is 'data about data' that describes the content, quality, condition, and other characteristics of data. Key metadata elements are what data was collected, when, where, how, and by whom. The Information and Data Management Handbook, which will be maintained by the Natural Resources Division and updated as necessary, contains the standards for information/data management by the Department.

The Department will incorporate a spatial component into all natural resources data through the use of GIS technology. This technology allows the linking of geographic data with descriptive data, facilitating analysis of relationships between park visitors, resource preservation, maintenance and operational needs within a geographic context. GIS technology is dependent upon constantly evolving software and hardware, and users must be trained to become proficient in its use. The Information and Data Management Handbook contains the standards for GIS use in the Department.

0313.4 Science and Research

Scientific research and studies designed to increase understanding of ecological processes and resources in parks are a valuable source of information for park managers. The Department has an interest in and will encourage scientific investigations in the State Park System to better understand natural resource processes and features and to best determine and assess appropriate management actions.

Results of scientific activities, surveys or studies conducted in the parks, whether by employees, volunteers, or outside students or researchers, should be made available to park natural resource specialists, managers, the scientific community, and the public through final reports, technical publications and popular media, as appropriate.

0313.4.1 Scientific Collecting Permits

The California Department of Parks and Recreation welcomes interest in State Park System lands as research sites. Scientific studies designed to increase understanding of ecological processes and resources in parks are a valuable source of information for park managers.

In general, the living and non-living resources found within units of the State Park System are protected from disturbance, harm, or removal (CCR, Title 14, §§ 4305 to 4307) to prevent the immediate or cumulative degradation of the resource by indiscriminate collection, e.g. seashells or leaves. However, PRC § 5001.65 and CCR, Title 14, § 4309 provide for the granting of a special permit to allow scientific research within the State Park System with prior approval.

0313.4.1.1 Scientific Investigation and Collection Policy

It is the policy of the Department of Parks and Recreation to further biological, geological, soil, and paleontological scientific research within areas it administers, and to cooperate with authorized workers to the fullest extent compatible with its charge to provide long-term protection for ecological processes and natural resource elements. In furtherance of this policy, a scientific collecting permit is required for scientific activities pertaining to natural resources that involve field work, specimen collection, and/or have the potential to disturb resources or visitors.

Neither the Application and Permit to Conduct Biological, Geological, and Soils Investigation/Collection (DPR 65) nor the Application and Permit to Conduct Paleontological Investigation/Collection (DPR 412P) cover archaeological or historical material of any kind. There are separate applications and permits for these purposes described elsewhere in the Department's Operations Manual.

0313.4.1.2 Authorization for Collection

All requests for biological, geological, or soil investigation/collection permits must be submitted on the Application and Permit to Conduct Biological, Geological, or Soil Investigations/Collections Form (DPR 65). For single park unit or single park district requests, District Superintendents have approval authority for biological, geological, or soil investigation and/or collection permits in units within their District. The Natural Resources Division has approval authority for biological, geological, or soil investigation and/or collection permits covering more than one district, including systemwide permits.

Requests for paleontological investigations/collections must be submitted on the Application and Permit to Conduct Paleontological Investigations/Collections (DPR 412P). All permits to collect paleontological materials require review by the District Ecologist or District Paleontologist and the Natural Resources Division and approval of the District Superintendent.

The District Superintendent will ensure that only properly approved collecting/investigating activities are conducted. It will also be the District Superintendent's responsibility to ensure that resources are protected against unwarranted threats or damage resulting from such activities, and that the public's right to use and enjoy State Park lands is not encumbered or disrupted. The District Superintendent may immediately cancel that permit if collections are made improperly.

In addition to any permit issued by the California Department of Parks and Recreation, written approval may also be required in some circumstances by the California Department of Fish and Game (CDFG) and certain agencies of the federal government.

0313.4.1.3 General Limitations and Conditions on Scientific Collecting

It is the purpose of this section to set forth the circumstances when it is in the best interest of the Department of Parks and Recreation to grant a biological, geological, soil, or paleontological scientific collecting permit to remove, treat, disturb, or destroy park features, and to provide guidance for the process, limitations and conditions under which decisions to allow collection may occur.

Permits to collect specimens are issued only to qualified persons participating in research projects in which the specimens collected are an integral part of, and necessary to, the project. Specimens collected may not be used for commercial profit or personal benefit.

Collectors may be limited to collecting the kind, number, and size of materials described in the permit.

The Department does not issue permits for general classroom collecting, either supervised or unsupervised, because of the tremendous impact that the thousands of students participating in such activities would have on the resources managed by the Department.

All scientific collecting and investigations must be done in a manner that minimizes the impact on the unit's resources. When appropriate, the Department will set specific conditions requiring that collection be done in an inconspicuous manner, away from roads, trails and developed areas.

The permittee will contact the appropriate district office before beginning any field activity under the permit, and will present a copy of the permit together with evidence of additional collecting licenses and collecting permits, if required. District staff at that time may specify additional restrictions or conditions due to concerns regarding suitable collecting areas and/or times.

The permittee will submit a summary of information gathered to the applicable district where the collection/investigation took place, and to the Chief of the Natural Resources Division. The Department further requires that the collector make available to the Department any reports or material published as a result of the permit.

Due to the potential for both the import and export of pest organisms, DOM Chapter 0700, Pest Control, should be consulted during the course of review of any application for collecting within a unit of the State Park System.

0313.5 Inventory, Monitoring and Assessment Program (IMAP)

The function of the Inventory Monitoring and Assessment Program (IMAP) is to inventory, monitor, and assess the condition of natural resources in the State Park System. The purpose of natural resources inventories is to provide a foundation of knowledge about the biotic and physical resources such as invertebrates, mammals, birds, fish, reptiles, amphibians, vegetation, and water quality. Resource management goals, objectives, policies and programs are based on information derived from park inventories. Inventory information also provides the background for unit interpretive and education programs, and properly designed inventories will serve as baselines for subsequent natural resource monitoring. The purpose of recurring ecological monitoring is to develop scientifically sound information on the current status and long-term trends in the composition, structure, and function of a park's natural resources and ecosystem. A successful IMAP would provide answers to these questions:

- What natural resources are in parks?
- What is the condition of the park resources?
- How is the condition of the resources changing over time?
- What is the condition of resources outside of park boundaries (air, water, nonnative and migratory species) that might affect the condition of park resources?
- What are the implications of these findings to parks and to the larger ecosystems in which they reside?

Assessment of inventory and monitoring data is an important element of the knowledge-based natural resources management objective of the Department. Data may consist of numerical information from counts and measurements of park resources, narrative accounts of park resources, photographs, maps, or collections of voucher materials. Data management whereby data is kept secure and readily accessible requires consistent data management standards and reporting systems and is an important component of the IMAP.

IMAP projects are park-based and every park and District, with support from Service Centers and the Natural Resources Division, has a role in collecting inventory and monitoring data.

0313.5.1 IMAP Policy

Every District that contains significant natural resources will implement an Inventory, Monitoring, and Assessment Program as practicable. Directions for establishing the Program and standards for collection and management of data are described in the Inventory, Monitoring, and Assessment Program Framework Handbook.

0314 RESOURCE DAMAGE; PREPARATION AND RESPONSE

Damage to natural resources in units of the State Park System may be the result of a variety of causes both on park lands and on adjacent external lands including:

- Natural or human-caused emergencies such as wildfires, earthquakes, floods, hazardous materials releases, or oil spills;
- Non-emergency illegal activities such as livestock trespass, cultivation or manufacture of illegal drugs, or theft of natural resources such as timber trespass or diversion of water; or
- Non-emergency legal activities such as facility construction, maintenance, and visitor use.

Damage may include injury to or destruction of natural resources or the loss of resource availability for habitat or recreational purposes.

0314.1 Natural Resource Damage Resulting from Emergencies

Planning for emergencies can and should be conducted in anticipation of events, but by definition the date, time and place of an emergency cannot be scheduled for our convenience.

The Public Resources Code (PRC § 21060.3) defines an emergency as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services. These may be natural occurrences such as fire, flood, earthquake, or earth movements, as well as riot, accident, or sabotage. In the event of a declared emergency, the Governor is given broad powers (Government Code § 8646) including the suspension of certain state laws and regulations protecting the resources of the State Park System during the period of the declared emergency.

Due to the potential for short and long-term adverse impact to park resources during and after natural and human-caused emergencies, natural resources specialists should be involved in the early stages of emergency planning to help determine if the incident is human-caused and to assist in any response that may be appropriate to avoid and limit potential damage to natural resources.

0314.1.1 Emergency Preparation

In any natural or human-caused emergency valuable natural resources may be at risk. Preparation for and consideration of those risks should be addressed by comprehensive planning which considers potential historically recurring emergencies such as drought, wildfire, flood and earthquake, as well as infrastructure failure such as sewer and water system failure, oil spills etc. Part of any plan should include an inventory of sensitive resources at risk.

Other applicable Departmental documents, plans and programs such as Unit Wildfire Management Plans, Tree Hazard Program, Resource Management Plans, and Historic Zone Management Plans should be consulted.

0314.1.2 Emergency Response

In accordance with state law and regulation, the Department has adopted the procedures and processes of the Standardized Emergency Management System (SEMS) and the Incident Command System (ICS) as the Department's method of dealing with emergencies and disasters (see DOM Chapter 1500, Standardized Emergency Management System).

Sometimes the response to emergencies can be more damaging to natural resources than taking no action or taking a modified approach. For example, the standard use of bulldozers to create fuel breaks through wildlands during a wildfire can cause soil disturbance and associated impacts that are more damaging to natural resources than the fire itself.

Emergency response on State Park System lands should be made only after informed assessment of public safety, infrastructure threats, short and long-term environmental impacts and fiscal costs of the response and post-incident restoration needs.

0314.1.3 California Environmental Quality Act Compliance

Certain emergency activities are statutorily exempt from CEQA compliance. For additional information see DOM Section 0606.5.1.2, Emergency Exemption.

0314.1.4 After an Emergency

While most local, state and federal regulatory law makes provisions for emergency situations and waives on a temporary basis normal permit and consultation procedures, these requirements may not be totally waived. It is necessary to identify and consult with involved review agencies during and immediately after an emergency to identify their requirements. Where permits are required, application is normally expected in a week to 60 days depending upon the statute involved.

Monies such as those from the Federal Emergency Management Agency (FEMA) for federally declared disaster areas may be available to assist in repair and restoration of emergency damage. Consult with the Department's FEMA coordinator in the Facilities Support Division regarding procedures for reimbursement by FEMA for emergency damage.

Where the emergency has not been one associated with a natural occurrence, but with a human-caused situation, such as an oil spill, where liability may be an issue, it is particularly important to make and document a thorough damage assessment. This assessment may be the basis upon which damages are sought in a court of law and should clearly document and quantify in detail all resource damage, so that the cost of necessary mitigation, restoration and other monetary damages can be recovered.

0314.2 Natural Resources Damage Resulting From Non-Emergency Activities

Natural resources can be damaged by activities that are not the result of emergencies, e.g., timber harvesting, livestock grazing, illegal road building, shoreline protection and landscaping activities by adjacent property owners. In cases where natural resources are damaged by non-emergency activities, the following actions are recommended:

- Identify damage and collect data: photographs, vegetation or animal surveys, water quality samples;
- Assess and quantify damage: degree, size, duration of injury to the resources;
- Evaluate restoration needs: costs, timeframe for restoration;
- Identify responsible party if possible: civil or criminal prosecution, fines and compensation for damage;
- Conduct restoration activities: restore, rehabilitate, replace damaged resources, on-going monitoring;
- Develop strategies to avoid future damage; and

- Work with regulatory and permitting agencies and neighboring property owners to develop collaborative approaches for enforcement, restoration and future prevention actions.

0314.2.1 Timber Trespass

California law holds that ownership of a tree depends on the location of the tree trunk relative to the property boundary. If a property boundary or boundaries crosses any portion of the cross-section of the tree trunk where the trunk contacts the soil, then the adjacent property owners jointly own the tree. Furthermore that joint ownership is proportional according to the percentage of the tree trunk cross-section located on each side of the property boundary. A tree whose trunk is not intersected by a property line at the point of contact with the soil is wholly owned by the land owner regardless of whether the above ground portions of the tree hang over a neighbor's property. It is possible for a young, small tree close to the property boundary to be wholly owned by one owner, but later become jointly owned after the trunk widens during growth. A property owner who does not wholly own a tree cannot fell, prune, or brace that tree without first acquiring permission of the sole or joint owner(s).

Timber trespass is covered in three sections of California Law: Civil Code § 3346, Penal Code § 602, and Code of Civil Procedure § 733. These laws authorize collection of triple damages when intent can be proven; otherwise the award is double damages.

0314.2.2 Tree Appraisal Policy

Although the legal term for illegal removal or damage to trees wholly or jointly owned by another is timber trespass, the Department does not appraise its trees in terms of their marketable value as a wood product. The Department assesses value to trees according to the standard landscape appraisal techniques.

Any tree on Department-owned or managed lands which is felled, removed or damaged without authorization is appraised using the techniques outlined in the most current edition of the publication Guide for Plant Appraisal published by the Council of Tree and Landscape Appraisers. If the Department intends to pursue criminal or civil litigation against the suspected perpetrator of a timber trespass of Department owned or managed trees, a formal appraisal will be prepared by a Department employee or private arborist who is trained in this methodology.

0314.3 Oil Spills

In the case of an oil spill, both the response to the spill and the methods of collecting compensation from the responsible party are formalized in the Oil Pollution Act of 1990 (OPA 90). When an oil spill or other pollution event occurs, the Department, serving as Trustee for park and recreation resources may be entitled to compensatory restoration. This does not refer to attempts to clean up the impacted site and restore it to its pre-spill condition; that is primary restoration. Compensatory restoration is additional restoration that compensates the public for the interim lost ecological or natural resource services between the time of the incident and full recovery to pre-spill conditions. Ecological or natural resource services are those functions performed by a natural resource for the benefit of another natural resource and/or the public.

The U.S. Coast Guard and the California Department of Fish and Game Office of Spill Prevention and Response (OSPR) are lead agencies for response to oil spills that occur in marine waters off California. The U.S. Environmental Protection Agency and the Inland Oil Spill Response Unit of OSPR are leads for inland oil spills. The sequence of events following the report of an oil spill or spill of other hazardous materials is complex and is coordinated through the use of an Incident Command System or Unified Command System.

0314.3.1 Oil Spill Response Planning Policy

If a spill occurs on State Park System property, the Department will attempt to ensure that damage to State Park System natural resources caused by a spill and its response is

minimized through participation in the Planning Section and/or the Wildlife Branch of the Operations Section of the Incident Command System. Department natural resource specialists will provide information about park natural resources during the development of Incident Action Plans.

0314.3.2 Reporting Requirements for Oiled Animals

When two or more oiled animals are observed in the same general location on a single day, or when one oiled animal is observed on three consecutive days in the same general location, Department of Fish and Game OSPR should be notified through one of the Department's Communications Centers.

If five oiled animals are observed in the same general location in a single day, the State Office of Emergency Services should be notified through one of the Department's Communications Centers.

0314.3.3 Oil Spill Natural Resource Damage Assessment Policy

When State Park System properties are affected by oil spills, the Department will be involved in Natural Resource Damage Assessment (NRDA) to:

- a. Collect data to evaluate the injury to natural resources;
- b. Quantify the injury in terms of the area of habitat impacted, the degree of the impact, and the time until recovery; and
- c. Quantify the damages.

Following Department of the Interior Rules, NRDA is often done cooperatively with the responsible party, as well as with fellow trustee agencies. Coordination is critical because damages can only be sought once. Once the damage claim is completed, OSPR and the other trustees attempt to reach a settlement with the responsible party. When appropriate, the Department will serve on the "trustee council" following settlement to manage the funds and oversee the restoration work.

0315 PLANNING

0315.1 Acquisition Planning

One of the principal purposes of the State Park System is to preserve examples of California's natural landscapes, including its biological and physical values. Due to the complexity of its relief, geology, climate and soils, California enjoys a unique and complex biota far more diverse than that of any other state in the union. With thirty percent of California plant species being endemic and because of its expanding population, the California Floristic Province is one of the world's 25 hot spots where biological diversity is most seriously at risk. With a broad experience administering a system of vast natural resource diversity, the Department has an important role in preserving examples of the unique and representative natural areas that exist within the state's ten ecological regions and is well suited to manage unique natural resource areas. With California's ever-expanding population, the demand for resources and living space to support this population will result in ever-increasing pressure on the state's remaining wildlands. The Department will focus its efforts on sustaining ecosystems associated with the State Park System and identifying gaps in California's overall natural resource preservation efforts.

0315.1.1 Sustaining Ecological Systems in the State Park System

The Department will seek properties of appropriate size, configuration, location, and habitat value that link, or contribute to linking, existing units of the State Park System with other large blocks of protected habitat and properties that contribute to identified significant watersheds and buffers to existing State Park System wildlands.

0315.1.2 Gaps in California Natural Resource Preservation

The Department will seek properties that protect representative natural resource values in under-protected ecological regions, under-protected habitat types statewide and unique natural resource areas, including locations of unusual speciation, wetlands and riparian areas, rare habitat types and physical features not represented on protected lands.

0315.1.3 Department Planning Process

The Department has adopted a process for identifying, nominating, evaluating and prioritizing potential natural resource acquisitions for the State Park System. This process does not apply to the State Vehicular Recreation Area and Trail System or to the Off-Highway Motor Vehicle Recreation Division, which plans its own property acquisition program based on separate laws and funding sources, with the Off-Highway Motor Vehicle Recreation Commission acting on its acquisition projects.

The Department's process is an annual acquisition nomination cycle designed to mesh with the State's budget process. The purpose of this process is to identify and address the deficiencies and needs of the State Park System by means of a mission-based process for developing acquisition proposals for real property, to develop and maintain a ranked list of acquisition proposals on which to base funding decisions and to make recommendations regarding acceptance of real property by gifts, transfers or nominal-cost leases based upon their natural resource value.

0315.2 Systemwide

Systemwide planning refers to any long-range, management level planning beyond the scope and scale of a single unit or district. Systemwide planning will typically address issues and trends, needs and deficiencies (gap analyses), roles and responsibilities, or actions and opportunities for the entire State Park System (or the Department beyond the State Park System). Systemwide planning may also focus on one or more of the core elements of the System; i.e., Natural Resources, Cultural Resources, Recreation, Interpretation/Education, Facilities, Public Safety and Visitor Services. Typically, systemwide planning will have a 20-year horizon. Examples of systemwide planning include the State Park System Plan, California Outdoor Recreation Plan, California History Plan, and Statewide Trails Plan.

The Acquisition and Development Division maintains the Department's "Planning Handbook" which provides guidance for State Park planning at all levels.

0315.3 Regional/Landscape/Watershed/Habitat Conservation Plans

The purpose of this section is to identify the purpose, importance and role of the Department in conservation/preservation efforts beyond units of the State Park System. Conservation planning takes place in a variety of forms, depending primarily on the purpose and authority of participating entities. The planning discussed below normally takes place in a sub-unit of an ecological region.

Regional conservation plans in the form of Natural Community Conservation Plans (NCCP) or Multi-Species Habitat Conservation Plans (MSHCP) are normally led by counties with state and federal regulatory agency assistance. Planning areas can be countywide or sub-units thereof, including cities. These efforts normally focus on identifying future reserves to protect a variety of habitats, listed and other species, and community open space. Conservation strategies usually identify reserve (protected) lands of which units of the State Park System may serve as core areas.

Landscape planning may be carried out by non-governmental organizations and sometimes includes regulatory agencies and land acquiring agencies, such as the Department. Landscape planning areas may cross local jurisdictions and may possess similar topography, habitat/wildlife, and land use challenges. These efforts normally result in identifying priorities for land and easement acquisition and other forms of conservation.

Watershed planning normally focuses on a single watershed, engaging a local conservation district, landowners within the watershed and local conservation groups. A primary purpose of these efforts may be healthy, sustainable aquatic systems, as well as some of the above objectives.

Department staff are encouraged to participate in these efforts at a level commensurate with the applicability to park units.

0315.3.1 Habitat Conservation Plan Approval Policy

Habitat Conservation Plans (HCP) are periodically proposed as a long-term method to address protection of listed species and to provide for incidental take of listed species during otherwise legal management activities or visitor use. While approved HCPs may help to streamline future development or use, preparation and implementation of these plans can be problematic in terms of costs and effects on other management priorities. In addition, agreed actions per an approved HCP in one district may set the standard of management and use limitations for other State Park System units. For these reasons, districts or headquarters units will not prepare an HCP or enroll lands in such an effort unless approved in writing by the Director or Deputy Director of Park Operations.

0315.3.2 Purpose of Conservation Planning

Regional and local conservation planning permits focus on a wide variety of natural resource conservation needs over an area of multiple ownerships resulting in identification of the most meaningful conservation objectives, while providing for orderly growth and development. Large blocks of habitat are identified in the form of reserves that, if properly planned using sound conservation principles, can sustain habitat and wildlife populations. Each effort can contribute to preserving representative examples of all of California's natural habitat types and the wildlife dependent upon those habitat types. Through collaborative regional planning, conservation/preservation costs should be reduced and effectiveness in the areas of restoration, monitoring, mitigation and acquisition should be increased.

0315.3.3 Benefits of Conservation Planning to the State Park System

The purpose of the State Park System as related to natural resources is to protect and restore significant representative examples of the biological and physical environment in all ten ecological regions of California. The State Park System is to be managed to help preserve California's extraordinary biological diversity. To ensure that natural resource management provides long-term preservation and enjoyment by future generations, parkland must be managed with a focus on sustainability.

Landscape, regional conservation, and watershed planning can directly contribute to the above purposes in the State Park System. Such planning efforts serve to identify areas for conservation and preservation of sustainable size, condition and configuration. Many of these areas will rely on State Park System lands as core areas of a conservation land reserve. These planning efforts should also provide for multiple species protection, in part through protecting representative examples of most habitat types in the planning area. Broad scale planning should establish linkages from State Park System lands to other protected areas, thus reducing plant and animal losses caused by fragmentation and resulting ecosystem decay. Proper zoning and other land use controls along urban/parkland boundaries should reduce the potentially serious impacts of urbanization on biodiversity.

These conservation planning efforts can greatly assist the Department in identifying statewide, district and unit priorities for natural resource management. Department programs that benefit from clarification of priorities include acquisition, prescribed fire, exotic species control, monitoring, research, and defensive planning. In addition, meaningful working relationships in all of these program areas are increased.

0315.4 Unit-level Planning

Unit-level planning occurs when the goals, objectives, and actions necessary to accomplish them are identified in a series of planning steps. The Department employs a unit planning process that begins, under ideal circumstances, with the classification of the unit, which establishes broad but fundamental management goals and ends with individual plans for specific projects. Intermediate unit-level planning includes unit General Plans and subject-oriented or area-oriented plans. All unit-level planning must take into account any higher order of policy direction and established goals.

All of the above steps in the planning process require a level of knowledge of the natural resources present in the unit and their condition. The breadth and detail of knowledge needed varies, depending upon the level of planning.

The following sub-sections summarize various unit-level planning efforts.

0315.4.1 Interim Management Planning

Occasionally the Department prepares interim management plans (IMP) after acquiring new units and before preparing a General Plan. Prior to preparing an IMP, a natural resource inventory appropriate for the level of detail of an IMP will be prepared. At this time, a natural resource condition assessment should be prepared, routine natural resource maintenance activities identified and stewardship projects entered into the Park Infrastructure Database (PID). The IMP will identify natural resource management measures, as well as land use and interim public use facilities.

0315.4.2 Unit Classification Planning

The classification system provides the broadest management policy and goals for a unit. Classification sets forth the primary purpose of each classified unit, identifies in general what types of facilities and uses may be permitted, and provides direction on how unit resources will be managed.

Classification planning includes obtaining and summarizing information on the unit's natural, cultural, and recreational resources and preparing documents that explain the Department's recommendations for unit or subunit classification and naming. The documents are made available to the public for review and are transmitted to the State Park and Recreation Commission for their consideration in adopting park unit and subunit classifications and names. For additional information, see DOM Section 0304.2.

0315.4.3 General Plan

The General Plan is the primary management guideline for a unit, defining a framework for resource stewardship, interpretation, facilities, visitor use and services. General Plans define an ultimate purpose, vision, and intent for unit management through goal statements, guidelines, policy statements, and broad objectives. For a full description of unit General Planning see the Department's Planning Handbook.

0315.4.4 Resource Management Plan

Resource management plans define the specific objectives, priorities, and general methodologies on how goals provided in higher level policy or plans will be accomplished. Prepared on an as-needed basis, resource management plans typically focus on a specific subject and/or area within a unit, such as a unitwide vegetation management plan, unitwide prescribed fire management plan or a plan for controlling exotic species in a particular geographic area within a unit.

0315.4.5 Resource Project Plan

Resource project plans define a specific project in detail. They identify the resource problem, describe the environmental setting, provide justification for the proposed actions, state

specific goals and objectives, detail the methods to be used and the materials needed, describe criteria for measuring success, outline monitoring to be employed, establish a proposed budget, provide a method of documenting the work performed, evaluate the results, propose remedial actions if necessary, and list references and persons consulted.

0316 PROJECT ENVIRONMENTAL REVIEW

Chapter 0600, the Environmental Review chapter of DOM, describes assignment of responsibilities in the Departmental implementation of the California Environmental Quality Act (CEQA, PRC § 21000 et seq.), the Departmental processes for preparation of environmental documents for Department projects and the review of other entities' projects. As described in that chapter, proposed Departmental natural resource management projects should be analyzed to determine whether an activity is a "project" under CEQA, if the proposed activity has the potential to cause adverse environmental impacts and what type of environmental document (Categorical Exemption, Negative Declaration, or Environmental Impact Report) is required for compliance with CEQA.

0316.1 Mitigation of Non-Department Projects on State Park System Lands

Regulatory agencies may approve development projects of others that include provisions for mitigation of natural resource impacts on off-site lands such as lands of the State Park System. Such off-site mitigation usually involves the dedication of private lands to a public or conservation agency or the restoration of lands already managed for long-term preservation. Typical mitigation measures include revegetation, habitat restoration, physical relocation of individual plants or animals, creation of new wildlife habitat, and acquisition of lands. In some instances the proposed mitigation may be part of a regional conservation planning effort, such as under the state's Natural Community Conservation Planning Program or a federal Habitat Conservation Plan.

Mitigation efforts may appear to be beneficial when they coincide with Department goals and land may be acquired and/or habitat restored at little or no cost to the Department. However, acceptance of an off-site mitigation proposal has a long-term effect on future Department land use options. Acceptance of off-site mitigation can commit Department staff to undertake the additional workload necessary to negotiate the terms of mitigation proposals, oversee mitigation work and maintain the mitigation area so that the restoration efforts and long-term commitment of this land are not compromised. The potential cost of this work should be addressed early in the process.

0316.1.1 Off-Site Mitigation Policy

Mitigation that adds manageable lands with important resource values to the State Park System is acceptable and encouraged. The acquisition of lands with degraded resource value that are to be restored by the project proponent as a result of mitigation requirements is also acceptable. Mitigation that proposes to fund existing park operations is usually not in the interest of the environment and is not supported. The Department generally will not approve the use of existing State Park System lands for off-site natural resource mitigation of non-DPR projects unless it can be demonstrated that there is a clear benefit to the impacted resources and to the State Park System or the project is supported by an appropriate regional conservation planning effort. Also to be considered are feasibility, sustainability and financial commitment. (See Natural Resources Handbook for additional evaluation details.) Each mitigation proposal shall be reviewed and approved by the appropriate District Superintendent.

0317 USES AND NATURAL RESOURCES MANAGEMENT

Many different types of uses take place in units of the California State Park System. Some of these uses are carried out by the Department and other operating entities, but most are carried out by park visitors and concessionaires. The Department is charged with protecting, perpetuating and conserving park natural heritage values and with providing public enjoyment

of these resources for present and future generations. Park managers must actively manage and regulate park uses to protect park natural resource values.

0317.1 Visitor Recreational Uses

Many visitors come to State Park System lands to enjoy the scenic beauty and to explore the natural world. Many of the recreational opportunities afforded in parks are directly related to the diversity and health of the natural resources. Uses, including sightseeing, hiking, mountain bike riding, and camping can impact the health of the natural environment, and in turn, the quality of the visitor experience.

Once recreational uses become established, they can be very hard to change – both types of use and locations. Changing uses can also be costly. For example, in the past, overnight facilities were located within prime natural resources. Impacts of such uses were only later discovered, e.g. impact to wildlife movement or sustainable populations of keystone species. In the more recent past, values of solitude or soundscape were not fully understood.

Interim management plans and General Plans should assess natural resource values and visitor needs and opportunities on a regional basis. This can contribute to higher quality recreation, reduced capital outlay costs, reduced staff demands, and habitat conservation. At times, park planning for recreational uses has attempted to provide many recreational opportunities in a specific park, putting additional pressure on natural resources.

Unit long-term monitoring and health assessments of parks and selected natural resource values are important to understanding the location and intensity of certain recreational uses.

0317.1.1 Visitor Recreational Uses Policy

It is the policy of the Department of Parks and Recreation that careful analysis of long-term impacts to natural processes and resources will be carried out when planning recreational uses, including interim public use, for State Parks, State Reserves, State Natural Preserves and State Wildernesses. Districts should complete long-term planning for removal or relocation of impacting visitor uses within prime resource areas. District Superintendent closures, permanent or temporary, should be considered in areas where restoration is needed for significant natural resource values that have been degraded by recreational use. Long-term monitoring of the natural resource health will be selectively applied to assess recreational impact on key indicators of parkland health.

0317.1.2 Attractions in Themselves

A fundamental purpose of the State Park System is to provide opportunities for enjoyment of park natural resource values. The Department is committed to providing appropriate, high quality opportunities to enjoy parks. However, some types of facilities used by the public do not require a state park setting.

"Attractions in themselves" are prohibited in units classified as State Parks, State Seashores or in coastal stretches designated State Seashore by the Legislature (PRC §§ 5001.6, 5019.53 and 5019.62). It is sometimes difficult to make the distinction between those facilities that assist visitors in enjoying a park's resource values and those facilities that are attractions in themselves. Attractions in themselves are facilities that a portion of the public uses without experiencing the other opportunities for which a park was established and planned. These types of facilities, such as community centers, team sports complexes or "destination"-type restaurants, are not normally associated with resource-based outdoor recreation, do not depend on location within a park, and are often available to the public within a reasonable distance outside the park. These types of facilities can usually be accommodated outside a park unit, often on private land.

Attractions in themselves can have the following impacts:

- Reduce parkland available for resource-based outdoor recreational uses;
- Displace park users;

- Reduce the options and area for development of park facilities;
- Reduce the unit's sense of place;
- Reduce open space and habitat or restorable habitat acreage;
- Consume staff time for General Plan amendments, contracts and overseeing improvements.

It is recognized that some park facilities either acquired or developed in the past may be considered to be attractions in themselves. These facilities typically have long-established use and enjoyment as such and may be valued features of the State Park System.

0317.1.3 Taking, Gathering and Collecting Natural Resources

0317.1.3.1 Fishing

Recreational fishing will be allowed in parks when it is authorized, or not specifically prohibited, by federal law, provided that it does not jeopardize natural aquatic ecosystems or riparian zones. When fishing is allowed, it will be conducted in accordance with applicable state laws and regulations. The Department may seek to restrict fishing activities through the Department of Fish and Game and the Fish and Game Commission whenever considered necessary to achieve management objectives outlined in a park's resource management plan or to otherwise protect park resources or public safety.

Commercial fishing is allowed only when specifically authorized by state law.

0317.1.3.2 Hunting

Hunting shall not be permitted in any unit now in the State Park System and officially open to the public on or before June 1, 1961, nor any unit thereafter acquired and designated as a state park and may only be permitted in new recreation areas which are developed for such use (PRC § 5003).

Hunting or any other method of harvesting wildlife by the public is allowed in the State Park System only where specifically authorized by state law. Hunting is only permitted in units classified as state recreation areas, and only when found by the State Park and Recreation Commission to not pose a threat to the safety of other users (PRC § 5003.1).

Where authorized, hunting will be conducted in accordance with applicable state laws.

0317.1.3.3 Driftwood

The collection of driftwood within units of the State Park System is described and limited by CCR, Title 14, § 4306.

No permit is required for these activities in accordance with applicable law and code. Collection is limited to fifty pounds or one piece of driftwood per day per person. In general, the use of tools, vehicles, and equipment for collection is prohibited. Any collection of these materials shall be for personal use only and not for commercial purposes.

Upon a finding by the District Superintendent that resources may be at risk due to collecting, it shall be their responsibility either to post a prohibition or to describe the kind, number and sizes of materials to be collected and if necessary, collection areas.

Under certain circumstances, the District Superintendent may determine that it is in the best interest of the Department to authorize the collection of driftwood in specific units. This decision shall be based upon written findings describing the circumstance and benefit to the Department. Authorizations for such collection shall specify the time, place, method, quantity, and purpose.

0317.1.3.4 Mushrooms

Collecting permits for mushrooms for scientific or educational purposes may be obtained as described in DOM Section 0313.4.1, Scientific Collecting Permits. The collecting of mushrooms in units of the State Park System is permitted by CCR, Title 14, § 4306 when specifically authorized by the Department for non-commercial personal use.

Conditional authorization for mushroom collection for non-scientific or non-commercial use may be obtained from the District Superintendent of the specific unit of the State Park System where collection is to occur. Such collection is limited by regulation to a batch of mushrooms not to exceed five pounds wet weight or to a single mushroom if that individual mushroom is greater than five pounds wet weight by itself per person in possession.

Approval for collection for non-scientific or non-commercial use may only occur following consideration of the questions and guidance for mushroom collecting presented in the Natural Resources Handbook. An affirmative answer to any of those questions must be mitigated before any mushroom collecting can be allowed. Conditions of approval are also presented in the Natural Resources Handbook.

0317.1.3.5 Berries and Pine Cones

Collection of berries and pine cones within units of the State Park System is described and limited by CCR, Title 14, § 4306.

Conditional authorization for berry and pine cone collection for non-scientific or non-commercial use may be obtained from the District Superintendent of the specific unit of the State Park System where collection is to occur. Such collection is limited by regulation to no more than five pounds of berries per day per person and no more than five pounds of pine cones per day per person.

0317.1.3.6 Rocks and Rockhounding

Rockhounding is the recreational gathering of stones and minerals found occurring naturally on the undisturbed surface of the land, including panning for gold in the natural water-washed gravel of streams. Rockhounding within units of the State Park System is described and limited by CCR, Title 14, §§ 4301, 4307 and 4611.

The taking of mineral specimens for recreational purposes from state beaches, state recreation areas, or state vehicular recreation areas is permitted upon receiving prior approval of the Director (PRC § 5001.65).

Collection is limited to no more than five pounds per day per person of specimens for rockhounding. In general, the use of tools, vehicles, and equipment for collection is prohibited. Any collection of these materials shall be for personal use only and not for commercial purposes.

0317.1.3.7 Materials Gathered by California Native Americans

Natural resource utilization is traditional for native California Indians. In order to preserve this aspect of California's cultural heritage, the Department provides controlled access to California Indians within the State Park System for gathering of these resources for traditional cultural purposes (PRC § 5020.1(g)). Authorization for such gathering activities may be obtained from the District Superintendent of the specific unit of the State Park System where the gathering is to occur through approval of the DPR 864, Application and Permit for Native California Indian Gathering.

0317.1.4 Rock Climbing Policy

Technical rock climbing is a recreational activity that takes place in a number of park units throughout the State Park System.

It is the policy of the Department that, to protect geologic resources, District Superintendents may designate specific climbing areas, restrict the types of climbing, require mitigation, or close areas pursuant to a posted order. When new climbing areas are proposed, a CEQA review should be initiated to determine if impacts from climbing could be detrimental to scenic, natural, cultural and/or recreational resources.

Rock climbing activities should not be routinely restricted for reasons of liability. Per Government Code § 831.7, the Department is immune from liability for visitors engaged in such inherently dangerous recreational activities. The Department may be liable, however, if it encourages the activity or involves itself with the equipment used; therefore, districts will not take part in rock climbing activities, or inspect, place, or maintain climbing equipment. Climbers are responsible for maintaining their own equipment, and the Department is responsible for ensuring that resources are adequately protected.

0317.2 Commercial Uses

In general, commercial exploitation of resources in units of the State Park System is prohibited. This section does not apply to activities undertaken by the Department in conjunction with its natural resource management activities, such as forest restoration through tree removal by commercial contractors.

Commercial fishing is permissible, unless otherwise restricted, in state marine (estuarine) conservation areas, state marine (estuarine) cultural preservation areas, and state marine (estuarine) recreational management areas.

0317.2.1 Concessions

Concessions are private businesses operating under contract in units of the State Park System. Concessions provide products and services designed to enhance the park visitor's experience, which are not normally provided by State employees. Concession capital improvements, programs, products, and services must be compatible with the classification and General Plan of the affected park unit.

0317.2.2 Filming and Photography

State Park and Recreation Commission Policy IV-4 states, in part, that photographic activities in the State Park System shall not result in substantial or permanent alteration of landscape, damage or danger to wildlife, plant life, cultural resources or other resources, or unduly restrict use or access by the public. Additional guidance on filming production can be found in the Department's Guidelines for Filming in California State Parks.

Photography within State Parks generally falls into seven categories, five of which are defined as commercial, and generally subject to permitting requirements. Permits for these five categories are issued by the California Film Commission (Government Code § 14998 et seq.) following submission of DPR 245A, Motion Picture Activity Information, and approval by the district where filming is to take place. The commercial photography categories include:

- Documentary photography;
- Public Service Announcements;
- Student photography;
- Commercial still photography; and
- Commercial motion picture, video and television photography

0317.2.3 Agricultural Uses

Agricultural uses and activities are authorized in units of the State Park System by PRC §§ 5069 – 5069.4. The Department may issue agricultural leases and allow agricultural activities in individual units provided the proposed activities are consistent with PRC § 5069.1; a unit's General Plan, natural resources management plan or interpretive plan; any conditions of

acquisition for the unit; and the activities do not result in unacceptable impacts to park resources, values, or purposes.

0317.2.4 Livestock Grazing

Since 1957, after statewide review by the State Park and Recreation Commission, livestock grazing has been considered incompatible with park purposes, including natural resource protection and providing a meaningful outdoor recreational experience. Protecting and restoring natural processes is at the core of the State Park System's natural resource management. Livestock grazing is an artificial process impacting physical and biological resources. Grazing also impacts recreational opportunities. However, there are occasions when livestock grazing may be appropriate when it is clearly shown that a core park purpose is significantly served, e.g., natural resource restoration and interpretation (see State Park and Recreation Commission Policy II-6). In addition, short-term grazing may be appropriate to consummate land acquisition.

0317.2.4.1 Livestock Grazing Policy

It is the policy of the Department of Parks and Recreation that livestock grazing is an inappropriate use of parkland resources except under certain circumstances where a core park purpose is served. Due to the potential for inconsistent application of the Department's Livestock Grazing Policy and uncoordinated scientific monitoring, the Chief of the Natural Resources Division and appropriate Field Division Chief will approve any grazing contracts, leases or agreements deemed beneficial to the State Park System prior to execution.

Livestock grazing may be permitted under the following circumstances:

- a. When directly contributing to historic interpretation approved in a unit's General Plan;
- b. When necessary for a specific natural resource restoration purpose, which normally does not include fuels reduction or an alternative to extirpated ungulate grazing; or
- c. When it is a necessary component to an acquisition agreement, including scaled-down grazing to improve natural resources.

0317.2.5 Mineral Exploitation

As used in this section, mineral means all forms of valuable surface or subsurface deposits including petroleum products, ores, sand, or aggregate.

When property is deeded to the state for park or beach purposes, oil and mineral rights may be reserved by the grantor provided that any prospecting or extracting of oil and minerals shall in no manner disturb the surface of such property or any improvements placed in or upon the property in pursuit of its use for recreation (PRC § 5019). Commercial exploitation of resources in units of the State Park System is prohibited. However, slant or directional drilling for oil or gas with the intent of extracting deposits underlying the Tule Elk State Reserve is, with State Lands Commission lease approval, permissible (PRC § 6854).

The issue of exploitation of mineral resources is an important one, as mineral rights for as much as one-third of the total acreage of the State Park System are held by private entities through pre-existing claims and by the federal government.

Mineral extraction may use a variety of methods depending upon the mineral type and its location. Drilling for petroleum products, in-stream aggregate dredging, strip or pit mining of hard rock minerals, suction dredging, and recreational gold panning are some of the methods used for mineral extraction or recovery. Activities associated with mining can include exploration, extraction, processing, materials storage, waste rock spoil piles, transportation, and reclamation. Any of these activities can impact park resources regardless of whether they occur within, under, or in proximity to a park.

There is a long history of mineral extraction of various types in the State of California. The continuing impacts of these activities may affect the natural environment, and public health and safety. Regulation of new mining activities is complex at the local, state and federal

levels with often overlapping interests and jurisdiction. For example, the Supreme Court in *Granite Rock v. California Coastal Commission* found that state and local environmental law applies to mineral rights normally subject solely to federal administration. It is strongly advised that if a mineral extraction proposal of any sort is made either within or in proximity to a unit of the State Park System, Department Legal Counsel be consulted to gain a clear understanding of Departmental rights, applicable environmental review, and regulatory decision making processes as these may vary from situation to situation. A knowledge of California's Surface Mining and Reclamation Act of 1975 (usually referred to as "SMARA") (PRC § 2710 et seq.), which provides for the return of lands mined in excess of 1000 cubic yards to a productive use, is strongly recommended.

0317.2.5.1 Mineral Exploitation Within Parks Policy

Mineral exploitation or development may be allowed in parks only when prospective operators demonstrate that they hold mineral property rights, valid mining claims, or mineral leases. If this right is not clearly demonstrated, the Department will inform the prospective operator that, until proof of a property right is shown, the Department will not further consider the proposed activity.

All persons who conduct mineral development within parks will do so only in conformance with applicable laws, regulations, and Department policies. If the Department determines that the proposed mineral development would impair park resources, values, or purposes, or does not meet approval standards under applicable Department regulations and cannot be sufficiently modified to meet those standards, the Department will seek to extinguish the associated mineral right through acquisition.

Persons may not use or occupy surface lands in a park for purposes of removing minerals outside the park unless provided for in law. General management plans, land protection plans, and other planning documents for parks with mining claims, mineral leases, or other mineral interests will address these interests as appropriate.

0317.2.5.2 Continuing Mineral Use Within Parks

Unfortunately, in some parks a legacy of mineral exploitation has been continuing degradation of resources and threats to the public health as a result of abandoned mine lands. Impacts include acid rock drainage, residual mercury, damaged landscapes and drainages, toxic waste sites, abandoned equipment, open excavations, unsupported rock faces, etc. Unless they are Superfund sites, these problems are inherited with the land and become Departmental responsibilities. Some of these properties may now be considered historic; nonetheless, care and thoughtful consideration should be taken when acquiring such lands into the State Park System, as they may provide liability in excess of their park value. When such lands are currently within the system, they should be surveyed for identification and a management plan developed to insure public safety and minimization of continued environmental degradation.

0318 TRAINING

The Natural Resources Division and the Department's Training Office provide natural resources training to employees throughout the Department. The purpose of this training is to maintain effective coordination of natural resources management functions within the Department, to improve system-wide programs, and to provide updates on current trends in natural resources management.

Some natural resources issues, such as habitat protection for sensitive species, environmental review and compliance, or wildlife management in developed areas, are complex, have a range of staff responsibilities throughout the Department, and may require more specific training. District natural resource specialists may need to provide training at the district or unit level to facilitate integration of resource management efforts among staff, volunteers, and contractors throughout their respective districts. The Natural Resources Division provides support for these types of training activities on an as-needed basis.

0319 NATURAL RESOURCES INTERPRETATION AND EDUCATION

A public well informed about natural resource values and management issues can help to protect and manage natural resources in the State Park System. Beyond the park resources themselves, both highly controversial natural resource issues and natural resource management need to be interpreted, including informing the visiting public about their role in accomplishing park resource management/protection goals. In addition, habitat restoration projects temporarily alter the landscape in unsightly ways, and effective interpretation can reconcile these apparent contradictions by explaining resource management policies and practices designed to protect resources, as well as by promoting the concept of the sensitive and dynamic ecological systems of natural parklands. Enlightened visitor use and an informed constituency will provide the public participation and support needed to accomplish the Department's natural resource management goals.

Parks should thoroughly integrate information on resource management work and natural resource issues into interpretive and educational programs, as well as into printed and electronic media whenever appropriate. Along with informing park visitors, the education of residents and officials of adjacent communities and the area(s) surrounding a park about resource issues may be the most effective means of eliminating these resource threats and gaining support for the Department's policy choices. If resources managed by other agencies are affected, such agencies should be consulted during program planning.

0319.1 General Natural Resources Interpretation and Education Policy

It is the policy of the Department to interpret not only the natural resources of the parks and their values, but also the management actions and issues addressed in the Department's resource management programs. Interpretation will be an integral part of the resource management function of every park and included in General Plans, concession contracts, and unit resource management plans where appropriate and needed. Interpretation will be considered an essential part of dealing with statewide or regional resource management issues, and interpretation of complex issues will be included in interpretive planning. Additional information on natural resources interpretation can be found in the Natural Resources Handbook.

0319.2 Cooperation within the Department

Natural resource and interpretive specialists in the field should cooperate on any message with a natural resources focus: they should consider exchange of information an important part of their jobs and should obtain input and assistance from one another. Critical natural resources issues should be incorporated into other park unit interpretation where appropriate, and some important issues that have a public participation or public safety component, such as campground bear precautions, should be added to all park unit interpretive presentations and community outreach efforts.

Cooperation between Department resource management and interpretive functions in headquarters is important. Information on natural resource management or issues included in systemwide interpretive materials developed for the visiting public, for outreach purposes (e.g. informational brochures, fliers, and guidelines), for the Department's periodical publications, and for media releases on natural resource issues must be accurate and useful.

0319.2.1 Interpretation and Education Cooperation Policy

Natural resource specialists and interpretive staff in the Districts will cooperate in the interpretation of natural resource management programs/projects and natural resource issues, incorporating important resource messages throughout park interpretation efforts.

Department natural resource management and interpretive functions in headquarters will work together to provide the public with accurate, appropriate, and timely information in systemwide and outreach interpretive materials, and to assist field staff in natural resources interpretive efforts. To ensure quality, accuracy, and appropriateness, interpretive/educational material that addresses statewide or regional natural resources

management or issues should be reviewed by natural resources staff knowledgeable of the resources or issue, and familiar with Department policies, regardless of the funding source, the location of the work, or the contractor. This includes information in systemwide published and public information materials, posted on the Department and park unit and concessionaires' websites, in media releases, and in articles written for popular publications.

0320**COOPERATION AND MANAGEMENT WITH OTHERS**

The Department should pursue opportunities to improve natural resource management within parks and across administrative boundaries by cooperating with public agencies, appropriate California Native Indian representatives, and private landowners. Cooperation with other land managers can accomplish ecosystem stability and other resource management objectives when the best efforts of a single land manager might fail. Such cooperation may include restoration and research activities in parks. It may also involve coordinating management activities in several areas, integrating management practices to reduce conflicts, coordinating research, sharing data and expertise, exchanging native biological resources for species management or ecosystem restoration purposes, and establishing native wildlife corridors adjacent to or across park boundaries. In addition, cooperation of others may minimize the impacts of influences originating outside the parks by controlling noise and artificial lighting, protecting adjacent forest stands, protecting watershed processes, maintaining water quality and quantity, eliminating toxic substances, preserving scenic views, improving air quality, preserving wetlands, protecting threatened and endangered species, eliminating exotic species, managing the use of pesticides, protecting shoreline processes, managing fires, managing boundary influences, and using other means of preserving and protecting natural resources.

It is important that state park natural resource managers become familiar with local planning staff and procedures. They should attend meetings of planning commissions and boards of supervisors and represent and defend the interests of the Department.

It is also advisable that the Department work to improve the understanding of natural resource values and issues by reaching out to the criminal justice community. It is important that park personnel work closely with the local prosecutor (City Attorney or District Attorney) and directly with the courts to emphasize the importance of a park's existence. This close relationship allows prosecutors to more accurately defend park values. While protocols will vary from one jurisdiction to another, it is possible for judges to be invited on park tours where the importance of park rules and regulations as they apply to resource protection can be described.

Many types of formal agreements and management strategies can be constructed with these entities that will facilitate better natural resource management. Some of these agreements include; Coordinated Resource Management Plans (CRMPS), Weed Management Memorandum of Understanding (MOU), multi-species conservation plans, Habitat Conservation Plans (HCP), Wildfire and Prescribed Fire Plans, Species Recovery Plans, Bioregional Plans, mitigation bank agreements, and conservation plans.

Cooperation and coordination is as important within the Department's structure as it is with others outside. Regular efforts by supervisors and management to involve the various resource specialties, maintenance, and park operations serve to communicate issues and air potential difficulties before they become problems or cause conflict. It is equally important that natural resource specialists regularly communicate their project and program activities and management goals so that other employees are well informed, in an effort to eliminate activities that are at cross purposes.

0320.1**Cooperation Policy**

The Department will work and cooperate with other federal, state, and local land and natural resource management agencies to protect the natural resources of the State Park System. The Department will also work closely with elected officials at all levels of government, non-governmental entities including academic institutions, conservation organizations, professional societies, and national and local environmental organizations when the goals,

objectives or research functions of these organizations compliment our management. As appropriate, the Department will develop agreements with federal, state, and local governments and organizations, tribal groups, and private landowners to coordinate natural resource management activities in ways that maintain and protect resources and values.

0321 TERMS AND DEFINITIONS

The following terms and definitions are provided for the convenience of the user of this chapter.

- *Assessment* – Assessment in the context of the Inventory, Monitoring and Assessment Program refers to data analysis and decision-making based on information obtained from inventory and monitoring projects.
- *California Environmental Quality Act (CEQA)* – The State law (PRC §§ 21000 et seq.) requiring State and local agencies to consider and disclose the environmental implications of their actions, including projects undertaken or permitted by them. The law further requires State and local agencies to avoid significant environmental effects whenever feasible. Guidance in the application of CEQA is provided in its Guidelines (CCR, Title 14, §§ 15000 et seq.).
- *Desired Condition* – Following an inventory of park natural resources, a decision must be reached as to the desired condition of each resource. The desired condition may be the existing condition, such as a forest with a certain species composition and sizes of trees. If a condition other than what presently occurs in the park is determined to be the desired condition, then park management activities can be applied to bring about the desired condition. Quantifiable components of the desired condition are defined and measured during monitoring projects to track changes in the condition of resources.
- *Emergency* – A sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services. These may be natural occurrences such as fire, flood, earthquake, or earth movements, as well as riot, accident, or sabotage.
- *Endangered Species* - A native species, subspecies or population of a bird, mammal, fish, invertebrate, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. Any species determined by the California Fish and Game Commission as "endangered" on or before January 1, 1985, is an "endangered species" (California Fish and Game Code § 2062).
- *Exotic species* - Exotic species are those plants, animals and other organisms (such as fungi or pathogens) that occupy an area directly or indirectly as the result of deliberate or accidental human activities, rather than having evolved in that region for thousands of years. Exotic species are also commonly referred to as introduced, non-native, alien, non-indigenous, or invasive species.
- *Fossil* - Any remain, trace, or imprint of an organism, plant or animal that has been preserved in the earth's crust from some past geologic time. Fossils are the basis for our understanding of the history of life on earth, are an integral part of our planet's biodiversity, and are the only direct evidence of past life.
- *Geographic Information System (GIS)* - GIS is a system of computer hardware and software used for storage, retrieval, mapping, and analysis of geographic data. Spatial data and associated attributes in the same coordinate system can then be layered together for mapping and analysis. The Department maintains GIS capability at the district, service center, and headquarters levels, and in selected individual parks.

- *Global Positioning System (GPS)* - GPS is a radio navigation system that utilizes signals from satellites to special receivers on the ground so that users can determine their exact location, velocity, and time 24 hours a day, in all weather conditions, anywhere in the world. In practicality, overstory forest canopy or steep canyons can block the satellite signals. GPS provides a means of recording locations of natural resource features to assist data analysis using GIS, and for re-finding the features during future monitoring events.
- *Inventory* – The initial one-time quantitative or qualitative measurement of park resources. The methods used for inventory ideally will be the same as the methods eventually used for monitoring.
- *Metadata* – Metadata is "data about data" that describes the content, quality, condition, and other characteristics of data. Key metadata elements are what data was collected, when, where, how, and by whom.
- *Monitoring* – Monitoring is regular, standardized tracking of natural resources that uses set protocols. Monitoring is designed to detect trends in baseline data that was obtained from inventory projects. Monitoring may consist of simple reconnaissance level inspections or more statistically rigorous studies that bring a high level of confidence of detecting change.
- *Native/Natural* - The term "native" or the term "natural," when referring to native plant and animal communities or natural processes, refers to those organisms and processes that have co-evolved in the California landscape for thousands of years and were present in California prior to Euro-American modifications.
- *Natural Resources* - Includes physical resources such as water, air, soils, topographic features, geologic features, and paleontological resources; physical processes such as weather, precipitation, runoff, erosion, deposition, tidal action, and wildfire; biological resources such as native plants, animals, and communities; biological processes such as natural succession and evolution; and associated attributes such as natural sounds, solitude, clear night skies, and scenic vistas.
- *Park Values* - The full spectrum of tangible and intangible attributes for which parks have been established and are being managed. They are those possessions and attributes that bestow upon the lands of the system significance to the people as park system properties, or that enhance such lands for the specific purposes for which they were acquired.
- *Rare Plant* – A native plant taxon that has been formally designated "Rare" by the California Fish and Game Commission. "A species, subspecies, or variety is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens" (California Fish and Game Code § 1901).
- *Restoration* - The process of assisting the recovery of altered natural lands, habitats, processes, or populations toward more natural, sustainable levels.
- *Stewardship* – The administration of responsible care over the "commons," specifically the natural resource values in the State Park System (for purposes of this chapter of DOM).
- *Threatened species* - A native species, subspecies or population of bird, mammal, fish, invertebrate, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the California Fish and Game Commission as "rare" on or before January 1, 1985, is a "threatened species" (California Fish and Game Code § 2067).

- *Unit Data File* - All information and data regarding natural resources in a park are stored in the Unit Data File. This information/data may consist of actual counts and measurements of park resources, and may also include reports, maps, photographs, and voucher specimens. The information/data may be digital or actual and should be accompanied with adequate metadata to determine its significance.