

2 OPEN SPACE PRESERVATION AND THE MCOSD

2.1 Overview of the MCOSD

The MCOSD currently owns and manages 34 open space preserves across Marin County. The preserves are managed for both natural resource protection and recreation. They encompass some of the most ecologically sensitive resources within the county, and they are enjoyed by many thousands of county residents and visitors annually.

The mission of the MCOSD is:

We are dedicated to educating, inspiring, and engaging the people of Marin in the shared commitment of preserving, protecting and enriching the natural beauty of Marin's parks and open spaces, and providing recreational opportunities for the enjoyment of all generations.

The MCOSD preserves contain outstanding examples of northern California's natural vegetation communities, including oak-bay woodlands, savannas, grasslands, and wetlands. As protected areas they support both a high diversity of plant species and a large number of rare or locally endemic plant species. The preserves are managed to protect, or possibly restore, their natural undeveloped character, while providing for a wide range of visitor uses.

The 34 preserves owned and managed by MCOSD encompass more than 15,000 acres. Additionally the MCOSD holds conservation easements on approximately 3,000 acres of private lands that provide important wildlife corridors, public access, and other connections to MCOSD preserves and other protected open space. Visitors and community members access the preserves through a system of more than 250 miles of unpaved roads and trails from more than 280 trailheads. The network of roads and trails lies primarily within the preserves, but MCOSD also holds numerous public trail easements across private lands that link preserves to surrounding communities.

The MCOSD preserves are not contiguous. They are generally situated throughout the southeastern portion of the county. Most of the MCOSD preserves are located in or near population centers and major transportation corridors, reflecting their importance in connecting many of the county's communities with open space at the wildland-urban interface. Most MCOSD preserves are located within walking distance of neighborhoods. In some cases preserves adjoin other lands managed for public use, and in all cases preserves adjoin private property to some extent. MCOSD lands serve as boundaries between many of Marin's cities, towns, and communities.

2.1.1 Current Management Plans and Practices

Starting in the 1980s, MCOSD expanded efforts to manage vegetation resources on its preserves. Over a dozen preserve-specific resource management plans were developed (see Table 2-1), and became early blueprints for protecting sensitive plant and wildlife species, as well as for controlling nonnative plant species. General land management plans specific to one or more preserves were also prepared. Many of these documents contained vegetation management actions. In an effort to utilize that information, the documents were reviewed and synthesized, and relevant vegetation management recommendations were brought forward into the vegetation management plan.

Table 2-1 Current Management Plans and Processes	
Land Management and Resource Management Plans	
Kent Island Restoration Plan at Bolinas Lagoon (2009)	<i>The Kent Island Restoration Plan at Bolinas Lagoon</i> guides restoration of tidal wetlands at Kent Island. The plan includes 13 recommendations from the Bolinas Lagoon Ecosystem Restoration Project (see below).
San Geronimo Valley Salmon Enhancement Plan (2009)	The plan provides enhancement recommendations for salmonid habitats and associated riparian corridors in San Geronimo Valley to achieve the following goals: (1) preserve and improve habitat conditions for salmonids, (2) promote ecosystem resiliency through rehabilitating natural processes, (3) correct and avoid activities that degrade habitat, and (4) sustain character and quality of life in San Geronimo Valley.
Fuelbreak Vegetation Assessment– Marin County Open Space District (2008)	The <i>Fuelbreak Vegetation Assessment</i> assesses native vegetation diversity and maps invasive plant species in existing and proposed fuelbreak areas in 15 MCOSD preserves. It recommends perpetual maintenance of all current fuel management areas and fire roads to help curb the spread of invasive plants throughout the preserves, and the maintenance of specific areas for fire risk reduction, using alternative strategies (e.g. controlled burns) to meet fuel reduction goals. The assessment also recommends the potential realignment of some fuelbreaks from the interiors of the preserves to the perimeters of the preserves, and/or to already disturbed areas, to help maintain large intact areas of undisturbed native habitats. Maintenance guidelines are included for fuel management actions implemented within the interiors of the preserves, along with recommendations and planning-level cost estimates intended to assist MCOSD with prioritizing invasive species control efforts.
Draft Bolinas Lagoon Ecosystem Restoration Project Recommendations for Restoration and Management (2008)	This document contains very little on vegetation management. It focuses on restoration of natural sediment transport and natural processes and ecological function, protection of water quality, and the amelioration of human-induced negative effects. It contains 13 recommendations, which are also included in the Kent Island restoration plan (see above).
Ring Mountain Preserve Sensitive Resources Monitoring and Enhancement Strategy (2008)	The document provides baseline information about sensitive species locations on Ring Mountain and an assessment of impacts and remedial measures for managing sensitive vegetation, but it does not include comprehensive vegetation management recommendations for the preserve. It includes a list of targeted invasive plants and a list of priority invasive plant management projects in and near special-status species occurrences.
Grazing Recommendations for Mount Burdell Open Space Preserve (2008)	In addition to providing grazing recommendations, this document identifies vegetation management goals and objectives for the Mount Burdell preserve, summarizes existing site and grassland conditions, identifies and maps sensitive resources, identifies threats and impacts to resources (specifically, targeted invasive plants), and describes the current grazing regime and infrastructure.
Cascade Canyon and White Hill Open Space Preserves Draft Land Management Plan (2005)	The draft <i>Land Management Plan</i> for the Cascade Canyon and White Hill preserves establishes goals and operating policies; describes site conditions, including resource summaries and maps; describes fuel reduction strategies and fuelbreak placement; and recommends management actions for the two preserves. Goals include (1) preserving and enhancing the native plant and animal communities, geologic, hydrologic, and historic resources and scenic values of the preserves; (2) maintaining and enhancing opportunities for public recreation, education, and aesthetic enjoyment of preserves; (3) reducing the threat of wildfire to the surrounding community; and (4) minimizing and reducing the impacts of preserve use on the surrounding community. The plan attempts to reconcile the effects of varying management actions on the preserves' biodiversity by making recommendations about how to control invasive plant establishment in fuelbreaks, the timing and sequencing of maintenance activities, the priorities for monitoring, and the best management practices for trails and fire roads.

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Santa Venetia Marsh Enhancement Plan - Existing Condition Study and Enhancement Recommendations (2002)	The <i>Santa Venetia Marsh Enhancement Plan</i> assesses existing conditions, identifies invasive plant control actions, and identifies three categories of enhancement measures to improve habitat values and benefits: (1) Upland Buffer Zone enhancement planting, (2) buffer and marsh plain protection measures, and (3) channel modification.
Interim Management Guidelines for the Horse Hill Area Alto Bowl/ Horse Hill Open Space Preserve (1998)	Developed as an interim document to guide decision making until a more comprehensive management plan is prepared, this guideline focuses on achieving a balance of protecting resources while meeting equestrian needs. Recommendations for vegetation management include the fencing and monitoring of sensitive resources and the control of targeted invasive plants (e.g., broom, pampas grass, yellow and purple star thistles).
Bolinas Lagoon Management Plan Update (1996)	This plan has been superseded by the 2008 <i>Draft Bolinas Lagoon Ecosystem Restoration Project Recommendations for Restoration and Management</i> (see above).
Mount Tamalpais Area Vegetation Management Plan (1995)	The <i>Mt. Tamalpais Area Vegetation Plan</i> contracted by MMWD and MCOSD covers more than 19,000 acres of MMWD lands and an adjacent 1,150 acres of MCOSD preserve lands. The chief goals of the plan are fire-hazard reduction and maintaining the watershed's biological diversity.
Land Management Plan for Santa Venetia Marsh & Santa Margarita Island Open Space Preserves (1992)	The land management plan for these preserves recommends zoning to support prioritization of uses and management to protect resources. It includes policy statements about improving accessibility, communications with adjacent landowners, and dog management. It gives a high priority to actions to protect endangered species, presents best management practices for trail construction and viewshed management and targets invasive plants and control mechanisms. It briefly addresses fire management, with a focus on suppression, fuelbreak maintenance, and designated access routes.
Terra Linda, Sleepy Hollow & San Rafael Ridge Open Space Preserve - Land Management Plan (1991)	The land management plan for these preserves establishes goals and makes recommendations for maintaining ecological diversity, minimizing fire hazard, and providing public access and visitor use opportunities. Management recommendations are prioritized, and detailed descriptions and cost estimates are included. The plan identifies invasive plants.
Land Management Plan for San Pedro Ridge Open Space Preserve (1990)	Developed as a tool to guide MCOSD daily maintenance and management activities, this plan evaluates existing conditions and influencing factors, provides recommendations for improving resource conditions, and cites management issues to be addressed. It identifies invasive plant species and includes recommendations for control. It recommends that fire management be expanded as a resource management tool, instead of used as a tool for just managing fire hazard. It suggests that sensitive resource areas be designated to protect unique natural and cultural resources. The plan appendixes include survey data and maps.
Mount Burdell Open Space Preserve Native Tree Revegetation Plan (1990)	This plan outlines a revegetation strategy for 28 specific sites within the preserve. It describes site conditions, provides criteria for site selection and prioritization,, recommends revegetation techniques and timing, and estimates implementation costs. Native trees are the primary species for revegetation.
Land Management Plan for Indian Tree and Verissimo Hills Open Space Preserves (1989)	This land management plan outlines specific management recommendations for each preserve. Recommended actions include site-specific vegetation management (revegetation, invasive species control, biomass management, etc.), fire suppression, and trail placement and maintenance activities. The plan includes recommendations for zoning sites for high use and resource protection, completing district-wide fire management policies, creating multidisciplinary teams to ensure fire management actions are integrated, and restoring nondesignated trails.

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Land Management Plan for Roy's Redwoods and Maurice Thorne Memorial Open Space Preserves (1989)	This document is similar to the Indian Tree and Verissimo Hills plan. It outlines specific management recommendations for each preserve. Recommended actions include site-specific vegetation management (revegetation, invasive species control, biomass management, etc.), fire suppression, and trail placement and maintenance activities. The plan includes recommendations for developing a fire management policy that is consistent with restoration objectives.
Monitoring Plans, Status and Conditions Reports	
Range Resource Survey of Horse Hill, Mill Valley, Marin County 2009 Grazing Season (2009)	This document assesses the impacts of grazing on the grassland vegetation and recommends actions to address the issues. It includes observations and recommendations about controlling French broom (<i>Genista monspessulana</i>).
Terra Linda / Sleepy Hollow Preserve Goatgrass Management Project (2005-2009).	This document recommends actions to remove barbed goatgrass (<i>Aegilops triuncialis</i>) using an IPM approach to preserve native biological diversity and promote wildlife habitat.
Mt. Burdell Preserve Yellow Star Thistle Management Project (2005-2009)	This document recommends actions to control yellow star thistle (<i>Centaurea solstitialis</i>) using an IPM approach to restore an estimated 125 acres of land infested by this invasive plant.
Ring Mountain Preserve Sweet Fennel Management Project (2009)	This document recommends actions to remove sweet fennel using an IPM approach to preserve native biological diversity and promote wildlife habitat.

Preliminary Draft