

11 CONSERVATION AND OPEN SPACE

Conservation and open space are closely intertwined in Mariposa County. The County chose to prepare a combined Conservation and Open Space Element identifying issues and delineating programs for management and conservation of natural resources and open space.

11.1 CONSERVATION AND OPEN SPACE ISSUES AND FINDINGS

Open space defines much of the character of the County. Within the context of Mariposa County, the term "open space lands" assumes a different dimension than the same term applied in an urban setting. With nearly one million acres of land in the County, in the year 2002 there were approximately 50 acres of land area for every resident of the County.

Over 500,000 acres, constituting over 52 percent of the County, are under the control and management of the Federal government. The largest portion of Yosemite National Park, including Yosemite Valley, is located within the County boundaries in addition to large portions of the Sierra and Stanislaus National Forests. The Bureau of Land Management also administers tracts of land within Mariposa County.

Of the privately owned lands in the County, approximately 250,000 acres are utilized for agricultural grazing and timberland preservation. This represents nearly 56 percent of the total land in the County under private ownership.

The Open Space and Conservation Element recognize two important characteristics of the County. First, that open space in Mariposa County is abundant because of the significant public ownership. Second, agricultural lands have been "used" as open space without recognition that these lands are part of the working landscape supporting the local economy.

These issues are defined and addressed in this Element as follows:

- scenic resources,
- water resources,
- mineral resources,
- wildlife and vegetation,
- forest, and
- soils.

11.1.01 SCENIC RESOURCES

The County has an extraordinary diversity of scenic resources that contribute to the character and tourism base. The Yosemite Valley is a world-renowned scenic area and Yosemite National Park encompasses some of the world's most recognized scenic vistas. Although perhaps less known, the Merced River Canyon (west of Yosemite National Park) also has major scenic value. The U. S. Forest Service and Bureau of Land Management have jurisdiction over 98 percent of the Merced River Canyon area. The ruggedness of the terrain around the Canyon has precluded development in the area that could detract from its scenic value.

The County's scenic resources encompass its forested ridges and valleys, grasslands and rolling hills, free-flowing rivers and streams, and the historic character of its towns and settlements. Proper management protects the scenic qualities of these landscape elements. Uncluttered hillsides and ridgetops add value to land and homes in the County and to the quality of the visitors' experiences. Careful site planning and conscientious subdivision design preserves the rural character while accommodating the County's need for housing.

Motorists' views of these resources from the County's highways are among the most important scenic values and complement the beauty of the Yosemite Valley and Merced River Canyon. Although viewed by residents and tourists alike as important elements of the overall scenery, these lands are important to the County's economy and character values as well.

11.1.02 WATER RESOURCES

Water for domestic use is one of the most significant factors in accommodating growth in Mariposa County. Surface water available for domestic use is relatively limited. Large areas of the County have poor subsurface water potential. Permitting intense development in areas with poor subsurface water potential and where there is a high risk of subsurface contamination from septic tank effluent represents a threat to the County's limited groundwater resource.

The topography of the County in conjunction with low development densities has made development of central wastewater treatment facilities economically impractical in most areas. Because development will continue to rely in large part upon small private wastewater treatment facilities as a primary means of wastewater treatment and disposal, maintenance of wastewater treatment and disposal systems are critical.

11.1.03 MINERAL RESOURCES

Mariposa County is situated astride the southern extreme of the mineralized fault belt running through the Central Sierra Mountains, which is commonly referred to as the "Mother Lode." While it is generally recognized that the richest portion of the Mother Lode Fault System is north of Mariposa County, the County has a historic record of precious metal mining production and it is believed that valuable deposits of ore still exist in the County.

Mariposa County has one active slate quarry — Yosemite Slate Quarry, located off of Highway 140 on Agua Fria Road.

With the exception of sand and gravel extraction and processing, most mines in the County are now closed or only intermittently active.

There is a need for mining of construction materials and the resources are available in the County. As residential development occurs, the County is going to need more local sources for slate, gravel, sand, and other construction material.

11.1.04 WILDLIFE AND VEGETATION

Mariposa County has long been noted for its wildlife and its diversity of plant communities and wildlife habitats. These range from grasslands in the southwestern part of the County to montane and alpine environments in the Sierra. In addition to Yosemite National Park, Mariposa contains portions of the Sierra and Stanislaus National Forest and large tracts of Bureau of Land Management-controlled lands that provide habitat for many wildlife and plant species.

Agricultural and forest areas outside the public lands provide habitat for a variety of species. Specific habitat types may occur in continuous stretches as well as in isolated pockets, and wildlife may use certain corridors as they move between habitat types. For example, deer move between habitat types in the County in response to seasonal requirements. Riparian corridors are typically important for wildlife movement.

Many plant communities and wildlife habitats in the County have been modified over the years. In addition to growth in planning areas, these habitats and communities have been affected by activities such as agriculture, logging and mining, as well as rural residential development. There is wide variation in the degree of disturbance. The County still has large areas supporting healthy communities of native plants and animals, particularly in Yosemite National Park, the two national forests, and Bureau of Land Management lands.

A variety of ecosystems on disturbed and undisturbed lands countywide support living systems and geochemical processes, which provide a variety of essential services and important opportunities to County residents, visitors, and communities outside the County. Ecosystem services include:

- maintaining and enhancing air, water, and soil qualities;
- recycling wastes and pollutants and cycling essential nutrients;
- helping control pests and diseases; and
- pollinating plants.

Ecosystem services provide opportunities for recreation, aesthetic experiences, educational studies, scientific research, personal inspiration, and spiritual insights.

Increasing development results in both beneficial and sometimes harmful modification of Mariposa's varied landscapes. Conserving the qualities of the County's diverse ecosystems—including villages, towns, rural residential, and agricultural landscapes—are guided through General Plan programs appropriate to the diversity of the systems. Maintaining these qualities ensures the well being of residents and visitors, the sustainability of the economy, and the character of the County. At times system conservation includes intervention to balance the natural environment with the growth of the County.

Aside from the overall values associated with the variety of plant communities and animal habitats, there are special status species that may occur in the County. Special-status species are rare because they live in habitat of limited extent or because habitat has been degraded or destroyed. Federal, state, and local law protects special status species. Among the special status species that may occur in the County are nearly one hundred wildlife species and over one hundred plant species.

11.1.05 FOREST

Mariposa County contains over 700,000 acres of forested lands. This includes wooded private lands with commercially valuable timber in addition to large tracts in public ownership. Of the approximately 14 percent of lands in the County in private ownership, approximately 63,000 acres of commercially valuable timberland are privately owned. This is an economic asset for the County.

11.1.06 SOILS

Mariposa County is characterized by steep mountains and rolling hills cut by seasonal streams and river courses. These landforms are a product of millions of years of geological and biological activity and water erosion. Erosion is a process where underlying bedrock is reduced to soil through air, water, and organic decomposition. The soil cover is then washed from hillsides and mountainsides by seasonal rainfall and deposited where the terrain is less steep.

The degree of erodibility is dependent upon the steepness of the site as well as the basic characteristics of the individual soil type. As a general rule of thumb, the higher the clay content of the soil type, the more likely it is that the soil will resist the erosive action of water runoff. If not properly controlled, development and construction activities can accelerate natural erosion/sedimentation process. In the natural environment, accelerated erosion can influence plants and animals at the erosion site, degrade surface water quality, and affect aquatic life. On developed lands, failure to prevent excessive erosion results in expensive damage to property and improvements on- and off-site.

Maintaining and conserving healthy soil is a critical component of the County's natural resource management and agriculture preservation. Appropriate development patterns and land stewardship ensures there will be soils to support the agricultural economy and protect the natural environment for future generations.

11.2 GENERAL PLAN IMPLEMENTATION

Goal 11-1: Conserve the natural and scenic resources, and open space lands to protect and enhance the County's quality of life and character ensuring a viable economy.

Policy 11-1a: Conserve natural and scenic resources through County programs and development standards.

- Implementation Measure 11-1a(1):* The County shall establish guidelines to ensure development complementary to the scenic aspects of the County’s rural character.
- Timing: Short-term
 Responsibility: Mariposa County Planning Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Development standards.
- Implementation Measure 11-1a(2):* The County shall develop subdivision design standards for placement of structures on ridgelines and open hillsides.
- Timing: Short-term
 Responsibility: Mariposa County Planning Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Development standards.
- Implementation Measure 11-1a(3):* Develop flexible site development and clustering to conserve designated scenic routes, views, and viewsheds.
- Timing: Short-term
 Responsibility: Mariposa County Planning Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Development standards.
- Implementation Measure 11-1a(4):* The County shall develop guidelines for non-single family development within County highway corridors to preserve scenic resources. The guidelines will be developed into a scenic views plan for the preservation of visual quality along the County’s highways. The plan will identify resources, views, and programs, while protecting the rights of property owners.
- Timing: Intermediate-term
 Responsibility: Mariposa County Planning Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Scenic resource maintenance.
- Policy 11-1b:* Collaborate with other public and private agencies for conservation management plans and programs.
- Implementation Measure 11-1b(1):* The County should participate in conservation management planning with Federal and State and other public and private agencies.
- Timing: Ongoing
 Responsibility: Mariposa Planning, Agriculture Commissioner, Farm Advisory, Resource Conservation District, Public Works Department.
 Fiscal Impact: Unknown.
 Consequences: Creates opportunities that might result in some future requirements or expenditures.
- Policy 11-1c:* Implement standards that minimize impacts on and/or improve air quality.
- Implementation Measure 11-1c(1):* The County will implement Federal and State air quality regulations.
- Timing: Ongoing review standard
 Responsibility: Mariposa Planning and Public Works Department.
 Fiscal Impact: Unknown.
 Consequences: Improves air quality.

Implementation Measure 11-1c(2): Establish land use patterns that minimize impacts to air quality.

Timing: Short-term
Responsibility: Mariposa Planning and Public Works Department.
Fiscal Impact: Unknown.
Consequences: Improves air quality.

Implementation Measure 11-1c(3): Implement a program that minimizes impacts on and/or improves air quality that may include but are not limited to:

- Encourage maximized solar access where feasible and consistent with the maintenance of scenic values, in new subdivision designs to optimize energy efficiency; and
- Road improvement projects such as paving unpaved roads which improve air quality.

Timing: Intermediate-term
Responsibility: Mariposa Planning and Public Works Department.
Fiscal Impact: Unknown.
Consequences: Improves air quality.

Implementation Measure 11-1c(4): The County shall cooperate with the Air Pollution Control District (APCD), or successor agency, to:

- Review development proposals to address cumulative and long-term air quality impacts.
- Work with local public utility providers and the private sector to encourage the development and implementation of educational and incentive programs to encourage energy conservation, house weatherization, and solar energy use;
- Work with the Mariposa County Department of Public Works and homeowner associations to encourage the development and implementation of educational and incentive programs for composting, mulching, grinding, cogeneration, feedstocks, and chipping in lieu of outdoor burning;
- Work with appropriate agencies to develop programs to maximize the participation of employers in employer-operated van pool and/or ride sharing for employees and mass transit service for both employers and customers/visitors; and
- Work with the school districts to replace existing buses with less polluting models.

Timing: Ongoing
Responsibility: Mariposa Planning and Public Works Department.
Fiscal Impact: Unknown.
Consequences: Improves air quality.

Policy 11-1d: Ensure that light sources in new development are compatible with rural character and that the light sources do not produce glare that interferes with vision.

Implementation Measure 11-1d(1): Include as part of the comprehensive development standards include;

- lighting standards established by the International Dark Sky Association; and
- require that building materials have a low reflective index.

Timing: Short-term
Responsibility: Mariposa Planning.
Fiscal Impact: Unknown.
Consequences: Reduces night light and glare.

Goal 11-2: Protect and manage the use of Mariposa County’s limited water resources.

Policy 11-2a: Conserve water to accommodate County growth and sustainable agriculture.

Implementation Measure 11-2a(1): Implement standards for water conservation that are consistent with State guidelines, including requirements for the installation and use of low-flow plumbing fixtures in all new construction, and for the use of drip irrigation systems and drought-tolerant or low water using landscaping (including retention of existing native plant material) in all multi-family, commercial, resort, industrial and public developments.

Timing: Short-term
Responsibility: Mariposa County Building Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Development standards.

Implementation Measure 11-2a(2): Cooperate with the Mariposa Public Utility District and other wastewater generators in implementing programs for reuse of treated wastewater.

Timing: Ongoing
Responsibility: Mariposa County Planning Department, Building Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: County participates in programs designed to reduce wastewater disposal and use of groundwater.

Implementation Measure 11-2a(3): Cooperate with the domestic water system operators and public water purveyors in implementing programs to eliminate water loss due to leakage in pipes, ditches or other conveyance facilities.

Timing: Ongoing
Responsibility: Mariposa County Planning Department, Building Department, and Public Works Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Development standards.

Policy 11-2b: Preserve surface and sub-surface water quality.

Implementation Measure 11-2b(1): Review development designs to ensure compliance with Federal and State water quality regulations and to ensure that the project does not discharge contaminated water.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department, Building Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Development standards.

Policy 11-2c: Preserve the existing or potential sources of a sustainable water supply.

Implementation Measure 11-2c(1): Outside Town Planning Areas and Rural Centers, maintain low intensities of development in order to protect the capacity of watersheds.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: This enables the County to maintain the 5 acre density for Residential areas.

Implementation Measure 11-2c(2): Designate watershed areas of surface water systems where such systems and their proposed watershed areas serve or are capable of serving as a potable water source.

Timing: Intermediate-term
Responsibility: Mariposa County Planning Department, Building Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Watershed identification.

Policy 11-2d: Conserve water sources for water-dependent species and the continuity of riparian communities.

Implementation Measure 11-2d(1): Implement requirements for minimum building and grading setback lines from waters of the State (i.e., perennial streams and environmentally significant wetlands), that are adequate to protect stream, riparian, and wetland resource values.

Timing: Intermediate-term
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Development standards.

Implementation Measure 11-2d(2): Provide for clustering of development that protects and avoids impacts to significant water resources.

Timing: Short-term
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Development standards.

Goal 11-3: Provide for the reasonable development of mineral resources.

Policy 11-3a: Mining occurs in balance with adjoining uses and resources compatibility.

Implementation Measure 11-3a(1): Require a conditional use permit for mining activity and allow small scale mining through an administrative use permit.

Timing: Short-term
Responsibility: Mariposa County Planning Department.
Fiscal Impact: None.
Consequences: Code revision.

Implementation Measure 11-3a(2): Incorporate standards for the exploration, development, and reclamation activities associated with mineral resource projects.

Timing: Intermediate-term
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Code revision.

Goal 11-4: Conserve and enhance the ecosystems, plant communities, wildlife habitats, and the inherent diversity of both plant and animal species for the recreational, commercial, aesthetic, and basic ecosystems needs.

Policy 11-4a: Conserve the diversity of native ecosystems, plant communities, wildlife habitat, and plant and animal species in the County.

Implementation Measure 11-4a(1): The County will implement a Mariposa County Environmental Conservation Program. The Program shall include development standards and programs conserving, protecting, and mitigating the impacts on:

- significant and sensitive habitat including wildlife migration corridors,
- breeding and nesting areas (as seasonally appropriate);
- known occurrences of special status animal species;
- riparian habitat around bodies of water and along watercourses and seasonal drainages;
- known occurrences of special status plant species, and
- significant and sensitive plant communities.

Timing: Intermediate-term
Responsibility: Mariposa Planning Department.
Fiscal Impact: Allocation of staff resources.
Consequences: This program will describe mitigation measures.

Implementation Measure 11-4a(2): Site development and grading review should minimize the removal of native trees and groves of trees.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Preservation.

Implementation Measure 11-4a(3): The County shall develop and enforce standards that reduce or eradicate invasive species affecting the agricultural and natural ecosystems.

Timing: Short-term

Responsibility: Mariposa County Planning Department, Agricultural Commissioner.
Fiscal Impact: Allocation of Staff resources.
Consequences: Reduction of invasive species.

Implementation Measure 11-4a(4): The County shall publish landscaping guidelines for the use of site-appropriate native plant species.

Timing: Intermediate-term
Responsibility: Mariposa County Planning Department, Resource Conservation District.
Fiscal Impact: Allocation of Staff resources.
Consequences: Increased use of native plant species and reduction of invasive species.

Implementation Measure 11-4a(5): The County shall utilize collaborative planning efforts to coordinate local efforts to eradicate invasive plant species.

Timing: Ongoing
Responsibility: Mariposa County Planning Department, Agricultural Commissioner.
Fiscal Impact: Allocation of Staff resources.
Consequences: Reduction of invasive species.

Implementation Measure 11-4a(6): The County shall require site surveys in compliance with Federal and State regulations as part of environmental review to determine:

- The presence or absence of endangered species and their habitat;
- The presence or absence of threatened or rare wildlife and plant species and their habitat;
- The presence or absence of breeding raptors and migratory birds;
- The presence or absence of sensitive native plant communities;
- The presence or absence of native wildlife migration or travel corridors; and
- The presence or absence of jurisdictional wetland or other waters of the U.S.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Compliance with federal and state law.

Implementation Measure 11-4a(7): The County shall record the data collected from the required site surveys to create a comprehensive map of environmental resources in Mariposa County. The map shall include but not be limited to vegetation communities with associated habitats for sensitive wildlife species.

Timing: Ongoing
Responsibility: Mariposa County Planning Department.
Fiscal Impact: Allocation of Staff resources.
Consequences: Reduction of invasive species.

Implementation Measure 11-4a(8): During project review and environmental analysis, the County shall comply with Federal and State regulations to require measures that:

- Protect endangered species and their habitat;

- Protect threatened or rare wildlife and plant species and their habitats;
- Protect breeding raptors and migratory birds;
- Protect and avoid, to the extent feasible, sensitive native plant communities;
- Protect and avoid, to the extent feasible, native wildlife migration or travel corridors; and
- Protect and avoid, to the extent feasible, jurisdictional wetland or other waters of the U.S.

Timing: Ongoing review standard
 Responsibility: Mariposa County Planning Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Reduction of invasive species.

Goal 11-5: Avoid erosion and loss of soils due to development activities.

Policy 11-5a: Minimize impacts of grading activities.

Implementation Measure 11-5a(1): Review and amend the County Grading Ordinance provisions for erosion control on all development projects.

Timing: Short-term
 Responsibility: Mariposa County Planning Department, Building Department.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Development standards.

Implementation Measure 11-5a(2): Review and update the provisions of the County Grading Ordinance as needed.

Timing: Short-term
 Responsibility: Mariposa County Planning Department, Building Department, Resource Conservation District.
 Fiscal Impact: Allocation of Staff resources.
 Consequences: Erosion control.

11.3 RELATED GENERAL PLAN ELEMENTS

The County recognizes the importance of agriculture as a productive use of open space and in the conservation of water, soil, wildlife and other natural resources within the framework of a Working Landscape. The Agricultural Element includes goals, policies, and implementation measures for these purposes.

The Local Recreation Element identifies goals, policies, and implementation measures to preserve open space for recreational purposes.

Preservation of open space for public health and safety in hazard areas is addressed in the goals, policies, and implementation measures of the Safety Element.